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SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: SHANNON FOLEY Examiner #: 77851 Date: 4/11/03
Art Unit: 1648 Phone Number 30 8-3983 Serial Number: 09/825635
Mail Box and Bldg/Room Location: 8E12/8309 Results Format Preferred (circle): PAPER DISK E-MAIL

If mor than one search is submitted, please prioritize searches in order of need. MEJ

****

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Novel parenteral vaccine preparations

Inventors (please provide full names): Hanne Kristensen SONI; Jesus Ulbel RAHBEK; Stig Hasmul-Olsen + Lise CLAUSEN

Earliest Priority Filing Date: 8/9/00

***For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.**

Please search for a vaccine composition comprising:
① magnesium hydroxide
② magnesium carbonate pentahydrate
and
③ titanium dioxide.

2 Ox ONLY. No other salt was elected so no other search is required (Just wanted you to save time.)

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Structure (#) _____
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Patent Family _____
Other _____

Vendors and cost where applicable

STN ✓
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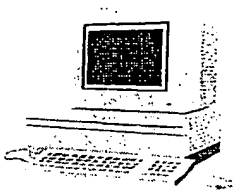
Other (specify) _____

PTO-1590 (8-01)

BioTech-Chem Library
Search Results
Feedback Form (Optional)



Scientific & Technical Information Center

The search results generated for your recent request are attached. If you have any questions or comments (compliments or complaints) about the scope or the results of the search, please contact ***the BioTech-Chem searcher*** who conducted the search ***or contact***:

Mary Hale, Supervisor, 308-4258
CM-1 Room 1E01

Voluntary Results Feedback Form

- *I am an examiner in Workgroup:* *(Example: 1610)*
- *Relevant prior art **found**, search results used as follows:*
  - ☐ 102 rejection
  - ☐ 103 rejection
  - ☐ Cited as being of interest.
  - ☐ Helped examiner better understand the invention.
  - ☐ Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

- ☐ Foreign Patent(s)
- ☐ Non-Patent Literature
  (journal articles, conference proceedings, new product announcements etc.)

- *Relevant prior art **not found**:*
  - ☐ Results verified the lack of relevant prior art (helped determine patentability).
  - ☐ Search results were not useful in determining patentability or understanding the invention.

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FILE COVERS 1907 - 24 Apr 2003 VOL 138 ISS 17
FILE LAST UPDATED: 23 Apr 2003 (20030423/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d l89 all hitstr tot

L89 ANSWER 1 OF 19 HCAPLUS COPYRIGHT 2003 ACS
AN 2002:927212 HCAPLUS
DN 138:8313
TI Solid form immunity **adjuvant** and **vaccine** containing same
IN Dupuis, Laurent; Ganne, Vincent; Aucouturier, Jerome; Trouve, Gerard
PA Societe D'exploitation De Produits Pour Les Industries Chimiques - Seppic, Fr.
SO PCT Int. Appl., 26 pp.
CODEN: PIXXD2
DT Patent
LA French
IC A61K009-00
CC 63-3 (Pharmaceuticals)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002096386	A1	20021205	WO 2002-FR1775	20020527
	W: US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
	FR 2825276	A1	20021206	FR 2001-7149	20010531
PRAI	FR 2001-7149	A	20010531		

AB The invention concerns a **vaccine adjuvant** solid compn. characterized in that it comprises a solid support for **injection** and in particular a compn. further comprising a surfactant or a mixt. of surfactants. The invention also concerns a method for prepg. such a compn. and its use as **adjuvant** phase of a **vaccine** compn. The invention further concerns its combination with a antigenic-phase lyophilizate and the pharmaceutical form comprising same.
ST solid immunity **adjuvant vaccine** metal cation
IT **Immunostimulants**
(**adjuvants**; solid form immunity **adjuvant** and **vaccine** contg. same)
IT Cations
Surfactants
Vaccines

(solid form immunity **adjuvant** and **vaccine** contg. same)

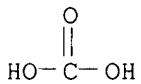
IT Carbohydrates, biological studies
Polysaccharides, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(solid form immunity **adjuvant** and **vaccine** contg. same)

IT 50-99-7, Dextrose, biological studies 63-42-3, Lactose 69-65-8, Mannitol 139-12-8, Aluminum acetate 299-28-5, Calcium gluconate **546-93-0, Magnesium carbonate** 994-36-5, Sodium citrate 1305-62-0, Calcium hydroxide, biological studies 1320-46-3, Manganese glycerophosphate 4468-02-4, Zinc gluconate 6485-39-8, Manganese gluconate 7631-86-9, Silica, biological studies 9004-34-6, Cellulose, biological studies 9004-53-9, Dextrin 9004-57-3, Ethyl cellulose 9004-65-3, Hydroxypropyl methyl cellulose 9004-67-5, Methyl cellulose 12619-70-4, Cyclodextrin 14127-61-8, Calcium cation, biological studies 14903-36-7, biological studies 15479-57-9, Aluminum salicylate 17375-37-0, Manganese carbonate 20074-52-6, Ferric cation, biological studies 21059-46-1, Calcium L-aspartate 22537-22-0, Magnesium cation, biological studies 23713-49-7, Zinc cation, biological studies 84285-67-6 206360-00-1
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(solid form immunity **adjuvant** and **vaccine** contg. same)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Csl Limited; WO 9415636 A 1994 HCAPLUS
(2) Eastbridge Limited; WO 9841188 A 1998 HCAPLUS
(3) Meditest; GB 1379008 A 1975 HCAPLUS
(4) Seppic; EP 1095662 A 2001 HCAPLUS

IT **546-93-0, Magnesium carbonate**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(solid form immunity **adjuvant** and **vaccine** contg. same)

RN 546-93-0 HCAPLUS
CN Carbonic acid, magnesium salt (1:1) (8CI, 9CI) (CA INDEX NAME)



L89 ANSWER 2 OF 19 HCAPLUS COPYRIGHT 2003 ACS
AN **2002:852314** HCAPLUS
TI Controlled delivery of metoclopramide using an **injectable** semi-solid poly(ortho ester) for veterinary application
AU Schwach-Abdellaoui, Khadija; Moreau, Marinette; Schneider, Marc; Boisramc, Bernard; Gurny, Robert
CS School of Pharmacy, Laboratory of Pharmaceutical Technique and Biopharmacy, University of Geneva, Geneva, CH-1211, Switz.
SO International Journal of Pharmaceutics (2002), 248(1-2), 31-37
CODEN: IJPHDE; ISSN: 0378-5173
PB Elsevier Science B.V.
DT Journal
LA English
CC 63 (Pharmaceuticals)
AB In animal health care, current therapeutic regimens for gastrointestinal

disorders require repeated oral or **parenteral** dosage forms of anti-emetic agents. However, fluctuations of plasma concns. produce severe side effects. The aim of this work is to develop a s.c. and biodegradable controlled release system contg. metoclopramide (MTC). Semi-solid poly(ortho ester)s (POE) prepd. by a transesterification reaction between tri-Me orthoacetate and 1,2,6,-hexanetriol were investigated as **injectable** bioerodible polymers for the controlled release of MTC. MTC is present in the polymeric matrix as a solubilised form and it is released rapidly from the POE by erosion and diffusion because of its acidic character and its high hydrosoly. If a manual **injection** is desired, only low mol. wt. can be used. However, low mol. wt. POEs release the drug rapidly. In order to extend polymer lifetime and decrease drug release rate, a sparingly water-sol. base **Mg(OH)2** was incorporated to the formulation. It was possible to produce low mol. wt. POE that can be manually **injected** and releasing MTC over a period of several days.

RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Beckett, A; Arzneim Forsch 1987, V37, P221 HCAPLUS
(2) Bruera, E; Cancer 1994, V74, P3204 MEDLINE
(3) Einmahl, S; Biomed Mater Res 2000, V50, P566 HCAPLUS
(4) Einmahl, S; Int J Pharm 1999, V185, P189 HCAPLUS
(5) El-Sayed, Y; Int J Pharm 1995, V123, P113 HCAPLUS
(6) Harrison, F; Arzneim Forsch 1994, V44, P519 HCAPLUS
(7) Heller, J; Adv Polym Sci 1993, V107, P41 HCAPLUS
(8) Madej, T; Br J Clin Pharmacol 1988, V26, P747 MEDLINE
(9) Merkli, A; J Biomater Sci Polym Edn 1993, V4, P505 HCAPLUS
(10) Merkli, A; J Control Release 1994, V29, P105 HCAPLUS
(11) Merkli, A; J Control Release 1995, V33, P415 HCAPLUS
(12) Roskos, K; Biomaterials 1995, V16, P313 HCAPLUS
(13) Zignani, M; J Biomed Mater Res 1998, V39, P277 HCAPLUS

L89 ANSWER 3 OF 19 HCAPLUS COPYRIGHT 2003 ACS

AN 2002:793349 HCAPLUS

DN 137:293545

TI Immunity **adjuvant** containing a complexed metal cation and **vaccine** containing same

IN Trouve, Gerard; Dupuis, Laurent

PA Societe d'Exploitation de Produits pour les Industries Chimiques SEPPIC, Fr.

SO PCT Int. Appl., 23 pp.
CODEN: PIXXD2

DT Patent

LA French

IC ICM A61K

CC 15-2 (Immunochemistry)
Section cross-reference(s): 63

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002080840	A2	20021017	WO 2002-FR1057	20020327
	WO 2002080840	A3	20030103		
	W: JP, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
	FR 2823119	A1	20021011	FR 2001-4644	20010405
PRAI	FR 2001-4644	A	20010405		

AB The invention relates to a compn. comprising a fatty phase and a non-null quantity of an organometallic gel obtained by complexing an anionic polymer or a mixt. of different anionic polymers with a multivalent metal cation or a mixt. of different metal cations. Said compn. is preferably in the form of an emulsion, the continuous phase of which is the fatty

phase and the dispersed phase is the multivalent metal cation-anionic polymer gel complex. The invention also relates to the method for prepg. the emulsion consisting in: prepg. an aq. suspension contg. at least one insol. multivalent cation salt, at least one water-sol. anionic polymer and optionally at least one hydrophilic surfactant; emulsifying the suspension thus prepd., with an oil phase contg. optionally one lipophilic surfactant; if necessary, solubilizing the insol. multivalent cation salt by modifying the pH of the emulsion; optionally adding an excess of multivalent cation; and neutralizing the final emulsion obtained. The invention also relates to the **vaccine** contg. said compn. Prepn. of an emulsion contg. calcium alginate gel as immunoadjuvant is disclosed.

ST immunoadjuvant complex metal cation **vaccine** calcium alginate

IT **Immunostimulants**
(**adjuvants**; immunity **adjuvant** contg. complexed metal cation and **vaccine** contg. same)

IT Fats and Glyceridic oils, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(animal; immunity **adjuvant** contg. complexed metal cation and **vaccine** contg. same)

IT Polyelectrolytes
(anionic, complexes with multivalent metal cations; immunity **adjuvant** contg. complexed metal cation and **vaccine** contg. same)

IT Cations
(complexes with anionic polymers; immunity **adjuvant** contg. complexed metal cation and **vaccine** contg. same)

IT Fatty acids, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(esters; immunity **adjuvant** contg. complexed metal cation and **vaccine** contg. same)

IT Carbohydrates, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(ethers; immunity **adjuvant** contg. complexed metal cation and **vaccine** contg. same)

IT Alcohols, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(fatty, ethers with polyols; immunity **adjuvant** contg. complexed metal cation and **vaccine** contg. same)

IT Fats and Glyceridic oils, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(hazelnut; immunity **adjuvant** contg. complexed metal cation and **vaccine** contg. same)

IT Gums and Mucilages
Surfactants
Vaccines
(immunity **adjuvant** contg. complexed metal cation and **vaccine** contg. same)

IT Acrylic polymers, biological studies
Castor oil
Coconut oil
Cod liver oil
Corn oil
Glycerides, biological studies
Hydrocarbon oils
Olive oil
Palm oil
Paraffin oils
Peanut oil
Rape oil
Soybean oil
Sunflower oil
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(immunity **adjuvant** contg. complexed metal cation and

vaccine contg. same)

IT Carboxylic acids, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(polycarboxylic; immunity **adjuvant** contg. complexed metal cation and **vaccine** contg. same)

IT Fats and Glyceridic oils, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(sesame; immunity **adjuvant** contg. complexed metal cation and **vaccine** contg. same)

IT Fats and Glyceridic oils, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(vegetable; immunity **adjuvant** contg. complexed metal cation and **vaccine** contg. same)

IT Fats and Glyceridic oils, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(walnut; immunity **adjuvant** contg. complexed metal cation and **vaccine** contg. same)

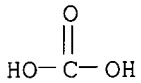
IT Fats and Glyceridic oils, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(wheat germ; immunity **adjuvant** contg. complexed metal cation and **vaccine** contg. same)

IT 50-21-5, **Lactic acid**, reactions 64-19-7, Acetic acid, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(immunity **adjuvant** contg. complexed metal cation and **vaccine** contg. same)

IT 50-70-4D, Sorbitol, esters with fatty acids 50-99-7D, Glucose, ethers 57-10-3D, Palmitic acid, esters 57-50-1D, Sucrose, esters 57-55-6D, Propylene glycol, esters with fatty acids 58-86-6D, Xylose, ethers 69-65-8D, Mannitol, esters with fatty acids 110-27-0, Isopropyl myristate 111-01-3, Squalane 111-02-4, Squalene 111-62-6, Ethyl oleate 112-62-9, Methyl oleate 112-80-1D, Oleic acid, esters 139-12-8, Aluminum acetate 141-22-0D, Ricinoleic acid, esters 299-28-5, Calcium gluconate 544-63-8D, Myristic acid, esters **546-93-0, Magnesium carbonate** 585-86-4D, Lactitol, ethers 598-62-9, Manganese carbonate 1305-62-0, Calcium hydroxide, biological studies 1320-46-3, Manganese glycerophosphate 1338-43-8, Montane 80 4468-02-4, Zinc gluconate 6485-39-8, Manganese gluconate 9000-07-1, Carrageenan 9000-30-0, Guar gum 9000-69-5, Pectin 9004-54-0, Dextran, biological studies 9005-32-7, Alginic acid 9005-38-3, Sodium alginate 9005-65-6, Montanox 80 11138-66-2, Xanthan gum 12441-09-7D, Sorbitan, esters 12441-09-7D, Sorbitan, esters with fatty acids 14127-61-8, Calcium cation, biological studies 14127-69-6, biological studies 14903-36-7, biological studies 15479-57-9, Aluminum salicylate 16958-85-3, Octyl palmitate 20074-52-6, Ferric ion, biological studies 22537-22-0, Magnesium cation, biological studies 23713-49-7, Zinc cation, biological studies 25618-55-7D, Polyglycerol, esters with fatty acids 30399-84-9D, Isostearic acid, esters 34828-64-3D, Mannitan, esters 34828-64-3D, Mannitan, esters with fatty acids 55608-27-0D, Hexol, esters with fatty acids 206360-00-1 468084-13-1, Montanide ISA 564 468084-14-2, Montanide ISA 763
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(immunity **adjuvant** contg. complexed metal cation and **vaccine** contg. same)

IT **546-93-0, Magnesium carbonate**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(immunity **adjuvant** contg. complexed metal cation and **vaccine** contg. same)

RN 546-93-0 HCAPLUS
CN Carbonic acid, magnesium salt (1:1) (8CI, 9CI) (CA INDEX NAME)



L89 ANSWER 4 OF 19 HCAPLUS COPYRIGHT 2003 ACS
AN **2002:657929** HCAPLUS
DN **137:206535**
TI Composition and method for controlled release **injections**
IN Roser, Bruce
PA Cambridge Biostability Ltd., UK; Idea, Inc.
SO PCT Int. Appl., 23 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K009-00
ICS A61K009-16
CC 63-6 (Pharmaceuticals)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2002066005	A1	20020829	WO 2002-US4269	20020214
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2002155129	A1	20021024	US 2001-784153	20010216
PRAI US 2001-784153	A	20010216		

AB The present invention is a pharmaceutical compn. and method for controlling the release of a drug or **vaccine** to a patient where a slow, controlled release of drug or antigen occurs over a considerable period of time after **injection**. The drug or **vaccine** is contained in sugar glass microspheres and then placed in an anhyd. liq., preferably perfluorocarbon, so that the **vaccine** is protected against dissoln. while remaining surrounded by anhyd. liq. This simple non-toxic system, deliverable by current syringe or present or future needle-free systems, is inexpensive and reliable and aids in **parenteral** drug delivery or mass immunization campaigns by reducing the need for repeated **injections**. There was a slow controlled-release of model antigen (alk. phosphatase) which had been suspended in perfluorophenanthrene.

ST controlled release **injection** perfluorocarbon
IT Analgesics
Anti-inflammatory agents
Anticoagulants
Antitumor agents
Bacteria (Eubacteria)
Buffers
Cardiovascular agents
Contraceptives
Immunomodulators

Immunosuppressants
Opioid antagonists
Protozoa
Vaccines
Vasodilators
(controlled release **injections** contg. perfluorocarbons)

IT Polysiloxanes, biological studies
RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(controlled release **injections** contg. perfluorocarbons)

IT Alditols
Antigens
Carbohydrates, biological studies
DNA
Glass microspheres
Hormones, animal, biological studies
Lipids, biological studies
Lipoproteins
Peptides, biological studies
Perfluorocarbons
Proteins
RNA
Toxins
Toxoids
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(controlled release **injections** contg. perfluorocarbons)

IT **Drug delivery systems**
(**injections, sustained release;**
controlled release **injections** contg. perfluorocarbons)

IT Drying
(spray; controlled release **injections** contg. perfluorocarbons)

IT Toxoids
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(tetanus; controlled release **injections** contg. perfluorocarbons)

IT 50-70-4, Glucitol, biological studies 57-50-1, Sucrose, biological studies 69-65-8, D-Mannitol 77-86-1, Tris 87-89-8, Inositol 87-99-0, Xylitol 99-20-7, Trehalose 470-55-3, Stachyose 512-69-6, Raffinose 585-86-4, Lactitol 585-88-6, Maltitol 608-66-2, Galactitol 2152-56-9, Arabinitol 7646-85-7, Zinc chloride, biological studies 7727-43-7, Barium sulfate 7784-30-7, Aluminum phosphate 7786-30-3, Magnesium chloride, biological studies 10103-46-5, Calcium phosphate **13463-67-7, Titania**, biological studies 21645-51-2, Aluminum hydroxide, biological studies 63213-92-3, Glucopyranosyl sorbitol 134613-11-9, Glucopyranosyl mannitol
RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(controlled release **injections** contg. perfluorocarbons)

IT 306-94-5, Perfluorodecalin 307-34-6, Perfluorooctane 355-42-0, Perfluorohexane 1580-20-7, Perfluorophenanthrene
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(controlled release **injections** contg. perfluorocarbons)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Eastbridge; WO 9841118 A 1998
(2) Roser, B; US 6190701 B1 2001 HCAPLUS
(3) Universal Preservation Technologies; WO 0137804 A 2001 HCAPLUS

IT **13463-67-7, Titania**, biological studies
RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(controlled release **injections** contg. perfluorocarbons)

RN 13463-67-7 HCAPLUS

CN Titanium oxide (TiO2) (8CI, 9CI) (CA INDEX NAME)

O=Ti=O

L89 ANSWER 5 OF 19 HCAPLUS COPYRIGHT 2003 ACS
AN 2002:293473 HCAPLUS
DN 136:308528
TI **Vaccine** compositions comprise Yershinia adhesion protein as **adjuvant**
IN Hermand, Philippe; Vande Velde, Vincent
PA Smithkline Beecham Biologicals S.A., Belg.
SO PCT Int. Appl., 46 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K039-39
ICS A61P031-00; A61P033-00; A61P035-00
CC 15-2 (Immunochemistry)
Section cross-reference(s): 63
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002030458	A1	20020418	WO 2001-EP3786	20010326
	WO 2002030458	C1	20020718		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	AU 2001062163	A5	20020422	AU 2001-62163	20010326
PRAI	GB 2000-25058	A	20001012		
	WO 2001-EP3786	W	20010326		

AB The present invention relates to **adjuvant** compns. which are suitable to be used in **vaccines**. In particular, the **adjuvant** compns. of the present invention comprises a Yersinia adhesion protein, optionally with a carrier. Also provided by the present invention are **vaccines** comprising the **adjuvants** of the present invention and an antigen. Further provided are methods of manuf. of the **adjuvants** and **vaccines** of the present invention and their use as medicaments. Methods of treating an individual susceptible to or suffering from a disease by the administration of the **vaccines** of the present invention are also provided.
ST Yershinia adhesion protein **adjuvant vaccine** carrier
IT Antigens
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(17-1A; **vaccine** compns. comprise Yershinia adhesion protein as **adjuvant**)
IT Oligonucleotides
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(CpG-contg.; **vaccine** compns. comprise Yershinia adhesion protein as **adjuvant**)
IT Proteins
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(PAP (pokeweed antiviral protein); **vaccine** compns. comprise

Yershinia adhesion protein as **adjuvant**)

IT Antigens
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(PSMA or prostate-specific membrane antigen; **vaccine** compns. comprise Yershinia adhesion protein as **adjuvant**)

IT Proteins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(adhesive; **vaccine** compns. comprise Yershinia adhesion protein as **adjuvant**)

IT **Immunostimulants**
(**adjuvants**; **vaccine** compns. comprise Yershinia adhesion protein as **adjuvant**)

IT Gene, microbial
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(ail; **vaccine** compns. comprise Yershinia adhesion protein as **adjuvant**)

IT Infection
(bacterial; **vaccine** compns. comprise Yershinia adhesion protein as **adjuvant**)

IT Spheres
(beads, latex; **vaccine** compns. comprise Yershinia adhesion protein as **adjuvant**)

IT Latex
(beads; **vaccine** compns. comprise Yershinia adhesion protein as **adjuvant**)

IT Drug delivery systems
(buccal; **vaccine** compns. comprise Yershinia adhesion protein as **adjuvant**)

IT Drug delivery systems
(carriers; **vaccine** compns. comprise Yershinia adhesion protein as **adjuvant**)

IT Peptides, biological studies
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(decapeptides, Stanworth; **vaccine** compns. comprise Yershinia adhesion protein as **adjuvant**)

IT Drug delivery systems
(diluent and excipient; **vaccine** compns. comprise Yershinia adhesion protein as **adjuvant**)

IT Escherichia coli
(enterotoxigenic; **vaccine** compns. comprise Yershinia adhesion protein as **adjuvant**)

IT Polyoxyalkylenes, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(ethers and esters; **vaccine** compns. comprise Yershinia adhesion protein as **adjuvant**)

IT Mucins
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(gene MUC1; **vaccine** compns. comprise Yershinia adhesion protein as **adjuvant**)

IT Lipoproteins
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(gene ospA, lipided; **vaccine** compns. comprise Yershinia adhesion protein as **adjuvant**)

IT Parasite
(infection; **vaccine** compns. comprise Yershinia adhesion protein as **adjuvant**)

IT Drug delivery systems
(intraduodenal; **vaccine** compns. comprise Yershinia adhesion

protein as **adjuvant**)

IT Gene, microbial
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(inv; **vaccine** compns. comprise Yershinia adhesion protein as **adjuvant**)

IT Proteins
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(invasins; **vaccine** compns. comprise Yershinia adhesion protein as **adjuvant**)

IT Antigens
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(melanoma-assocd., BAGE; **vaccine** compns. comprise Yershinia adhesion protein as **adjuvant**)

IT Antigens
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(melanoma-assocd., GAGE; **vaccine** compns. comprise Yershinia adhesion protein as **adjuvant**)

IT Antigens
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(melanoma-assocd., MAGE; **vaccine** compns. comprise Yershinia adhesion protein as **adjuvant**)

IT Animal virus
(meningitis; **vaccine** compns. comprise Yershinia adhesion protein as **adjuvant**)

IT Particles
(metallic salt; **vaccine** compns. comprise Yershinia adhesion protein as **adjuvant**)

IT Drug delivery systems
(mucosal, **vaccine**; **vaccine** compns. comprise Yershinia adhesion protein as **adjuvant**)

IT Drug delivery systems
(nasal, intra-; **vaccine** compns. comprise Yershinia adhesion protein as **adjuvant**)

IT Salts, biological studies
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(particle; **vaccine** compns. comprise Yershinia adhesion protein as **adjuvant**)

IT Polymers, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(porous particle; **vaccine** compns. comprise Yershinia adhesion protein as **adjuvant**)

IT Cell adhesion molecules
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(protein; **vaccine** compns. comprise Yershinia adhesion protein as **adjuvant**)

IT Toxoids
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(tetanus; **vaccine** compns. comprise Yershinia adhesion protein as **adjuvant**)

IT Antigens
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(tumor-assocd., PRAME; **vaccine** compns. comprise Yershinia adhesion protein as **adjuvant**)

IT Antigens
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL

(Biological study); USES (Uses)
(tumor-assocd.; **vaccine** compns. comprise Yershinia adhesion protein as **adjuvant**)

IT **Vaccines**
(**tumor**; **vaccine** compns. comprise Yershinia adhesion protein as **adjuvant**)

IT Haemophilus influenzae
(type b; **vaccine** compns. comprise Yershinia adhesion protein as **adjuvant**)

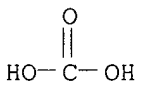
IT Allergy
Antitumor agents
Bordetella
Borrelia
Borrelia burgdorferi
Campylobacter
Chlamydia
Dengue virus
Haemophilus
Hepatitis A virus
Hepatitis B virus
Hepatitis C virus
Hepatitis E virus
Human herpesvirus 1
Human herpesvirus 2
Human herpesvirus 3
Human herpesvirus 5
Human immunodeficiency virus
Human papillomavirus
Immunostimulants
Infection
Influenza virus
Mammalia
Microspheres
Moraxella
Mycobacterium
Mycoplasma
Nanoparticles
Neisseria
Pathogen
Plasmodium (malarial genus)
Respiratory syncytial virus
Salmonella
Streptococcus
Susceptibility (genetic)
Toxoplasma
Yersinia
Yersinia enterocolitica
Yersinia pseudotuberculosis
(**vaccine** compns. comprise Yershinia adhesion protein as **adjuvant**)

IT Antigens
Carcinoembryonic antigen
Prostate-specific antigen
neu (receptor)
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**vaccine** compns. comprise Yershinia adhesion protein as **adjuvant**)

IT Antitumor agents
(**vaccines**; **vaccine** compns. comprise Yershinia adhesion protein as **adjuvant**)

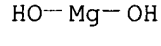
IT Infection
(viral; **vaccine** compns. comprise Yershinia adhesion protein

as **adjuvant**)
IT 2382-65-2
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(oligonucleotides contg.; **vaccine** compns. comprise Yershinia adhesion protein as **adjuvant**)
IT 9034-40-6, Luteinizing hormone-releasing hormone 137632-09-8, Her-2 kinase
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**vaccine** compns. comprise Yershinia adhesion protein as **adjuvant**)
IT 471-34-1, Calcium carbonate, biological studies **546-93-0**, **Magnesium carbonate 1309-42-8**, **Magnesium hydroxide** 7000-29-5, Calcium **magnesium carbonate** 7757-87-1 7758-87-4, Calcium phosphate 7778-18-9, Calcium sulfate 7784-30-7, Aluminum phosphate 9002-10-2, Tyrosinase 10045-86-0, Iron phosphate 15905-72-3, Calcium iron phosphate 21645-51-2, Aluminum hydroxide, biological studies 25322-68-3D, ethers and esters 35918-42-4, Iron potassium phosphate 52767-99-4, Ammonium iron phosphate 128478-31-9, 3D-MPL **141256-04-4, QS 21** 226408-87-3, Prostase
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**vaccine** compns. comprise Yershinia adhesion protein as **adjuvant**)
RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Falkow, S; US 5239066 A 1993 HCAPLUS
(2) Falkow, S; US 5338842 A 1994 HCAPLUS
(3) Oaks; ABSTRACTS OF THE GENERAL MEETING OF THE AMERICAN SOCIETY FOR MICROBIOLOGY 1999, V99, P282
(4) Oaks, E; WO 0018354 A 2000 HCAPLUS
(5) Picking, W; WO 0023462 A 2000 HCAPLUS
IT **546-93-0, Magnesium carbonate**
1309-42-8, Magnesium hydroxide
141256-04-4, QS 21
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**vaccine** compns. comprise Yershinia adhesion protein as **adjuvant**)
RN 546-93-0 HCAPLUS
CN Carbonic acid, magnesium salt (1:1) (8CI, 9CI) (CA INDEX NAME)



Mg

RN 1309-42-8 HCAPLUS
CN Magnesium hydroxide (Mg(OH)2) (9CI) (CA INDEX NAME)

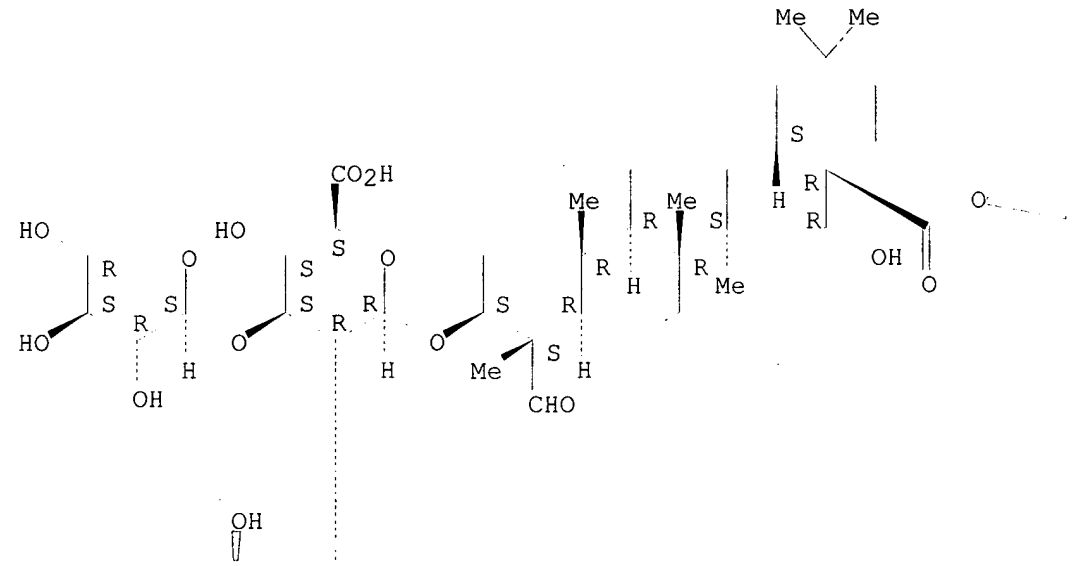


RN 141256-04-4 HCAPLUS
CN .beta.-D-Glucopyranosiduronic acid, (3.beta.,4.alpha.,16.alpha.)-28-[[O-D-apio-.beta.-D-furanosyl-(1.fwdarw.3)-O-.beta.-D-xylopyranosyl-(1.fwdarw.4)-O-6-deoxy-.alpha.-L-mannopyranosyl-(1.fwdarw.2)-4-O-[5-[[5-(.alpha.-L-arabinofuranosyloxy)-3-hydroxy-6-methyl-1-oxooctyl]oxy]-3-hydroxy-6-methyl-

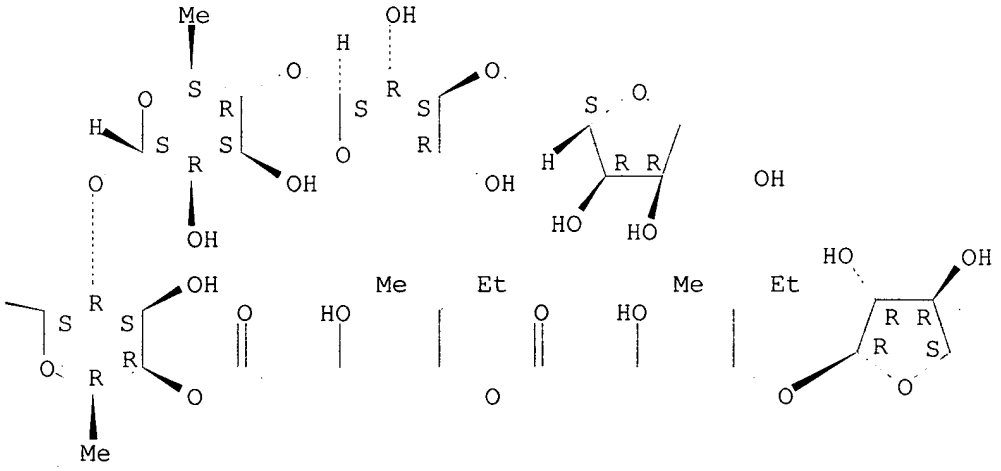
1-oxooctyl]-6-deoxy-.beta.-D-galactopyranosyl]oxy]-16-hydroxy-23,28-dioxoolean-12-en-3-yl O-.beta.-D-galactopyranosyl-(1.fwdarw.2)-O-[.beta.-D-xylopyranosyl-(1.fwdarw.3)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



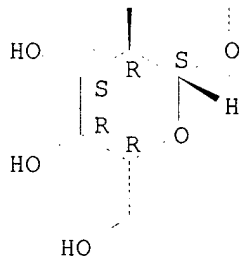
PAGE 1-B



PAGE 1-C

OH

PAGE 2-A



L89 ANSWER 6 OF 19 HCAPLUS COPYRIGHT 2003 ACS
AN 2002:142547 HCAPLUS
DN 136:189316
TI Oral solid dose **vaccine**
IN Vande-Velde, Vincent
PA Smithkline Beecham Biologicals S.A., Belg.
SO PCT Int. Appl., 32 pp.
CODEN: PIXXD2
DT Patent
LA English
IC A61K039-39; A61K039-00; A61K009-20; A61K039-02; A61K039-12
CC 63-3 (Pharmaceuticals)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002013858	A1	20020221	WO 2001-IB1711	20010814
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2001086168	A5	20020225	AU 2001-86168	20010814
PRAI	GB 2000-20089	A	20000815		
	WO 2001-IB1711	W	20010814		

AB The present invention relates to novel **vaccine** formulations suitable for oral administration. The **vaccine** formulations are in a solid form comprising antigen and suitable excipient, which after

insertion into the mouth, rapidly dissolve in saliva, thereby releasing the **vaccine** into the mouth. Specifically, the solid form may consist of a cake of **vaccine** which is formed from a liq. soln. or suspension by sublimation, preferably sublimation by lyophilization. Preferred **vaccines** are those contg. antigens which are derived from pathogens that normally infect or invade the host through a mucosal membrane, or those **vaccines** that further comprises an antacid. Particularly preferred **vaccines** are combination **vaccines** that comprise more than one antigen, and more preferably when the antigens are from more than one pathogen. Lyophilized oral **vaccines** were prepd. contg. influenza antigens 30 .mu.g, sucrose 2, sorbitol 3, dextran T40 4, amino acids 2, xanthane 0.3% and calcium carbonate 80 mg.

ST oral solid **vaccine** lyophilization

IT Hepatitis
(C, antigens; oral solid dose **vaccine** contg.)

IT **Immunostimulants**
(**adjuvants**; oral solid dose **vaccine** contg.)

IT Bordetella
Borrelia
Chlamydia
Cytomegalovirus
Dengue virus
Human herpesvirus 1
Human herpesvirus 2
Human herpesvirus 3
Human immunodeficiency virus
Human papillomavirus
Influenza virus
Meningitis
Neisseria
Plasmodium (malarial genus)
Respiratory syncytial virus
Salmonella
Toxoplasma
(antigens; oral solid dose **vaccine** contg.)

IT Peptides, biological studies
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(decapeptides, stanworth; oral solid dose **vaccine** contg.)

IT Antigens
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(hepatitis A; oral solid dose **vaccine** contg.)

IT Antigens
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(hepatitis B; oral solid dose **vaccine** contg.)

IT Antacids
Stabilizing agents
Thixotropic agents
(oral solid dose **vaccine** contg.)

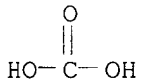
IT Alditols
Antigens
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(oral solid dose **vaccine** contg.)

IT **Vaccines**
(**oral**; **oral** solid dose **vaccine**)

IT Alcohols, biological studies
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(polyhydric; oral solid dose **vaccine** contg.)

IT Antigens

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(tumor-assocd.; oral solid dose **vaccine** contg.)
IT 50-99-7, Dextrose, biological studies 57-48-7, Fructose, biological studies 57-50-1, Sucrose, biological studies 59-23-4, Galactose, biological studies 63-42-3, Lactose 69-65-8, Mannitol 69-79-4, Maltose 99-20-7, Trehalose 471-34-1, Calcium carbonate, biological studies **546-93-0, Magnesium carbonate**
585-86-4, Lactitol 3458-28-4, Mannose 4618-18-2, Lactulose
9004-54-0, Dextran, biological studies 11138-66-2, Xanthan gum
13718-94-0, Isomaltulose 17606-72-3, Maltulose 21645-51-2, Aluminum hydroxide, biological studies
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(oral solid dose **vaccine** contg.)
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Denamur, F; WO 0112797 A 2001 HCAPLUS
(2) Seager, H; GB 1548022 A 1979 HCAPLUS
(3) Seager, H; WO 9921579 A 1999 HCAPLUS
(4) Seager, H; JOURNAL OF PHARMACY AND PHARMACOLOGY 1998, V50(4), P375 HCAPLUS
IT **546-93-0, Magnesium carbonate**
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(oral solid dose **vaccine** contg.)
RN 546-93-0 HCAPLUS
CN Carbonic acid, magnesium salt (1:1) (8CI, 9CI) (CA INDEX NAME)



L89 ANSWER 7 OF 19 HCAPLUS COPYRIGHT 2003 ACS
AN 2002:122817 HCAPLUS
DN 136:189313
TI **Parenteral vaccine** formulations containing **adjuvant** salts
IN **Soni, Nanna Kristensen; Rahbek, Janne Uldal; Aasmul-Olsen, Stig; Lund, Lise**
PA **Alk-Abello A/S, Den.**
SO PCT Int. Appl., 59 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K039-39
ICS A61P037-04
CC 63-3 (Pharmaceuticals)
Section cross-reference(s): 15
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	WO 2002011760	A1	20020214	WO 2001-DK532	20010809	<--

W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,

MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ,
TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG,
KZ, MD, RU, TJ
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2001079601 A5 20020218 AU 2001-79601 20010809 <--
US 2002051794 A1 20020502 US 2001-925635 20010809 <--
PRAI DK 2000-1194 A 20000809 <--
US 2000-224037P P 20000809
WO 2001-DK532 W 20010809

AB A **parenteral vaccine** formulation comprises at least one immunogenic substance, and as an **adjuvant**, one or more salts of Group 2 or Group 4 elements and their hydrates. When the **adjuvant** salt is included in **parenteral vaccine** formulations, the amt. of antigen necessary to induce an immune response, following one immunization, is reduced. The **vaccines** contg. **adjuvant** salts induced a persistent and specific immune response. Furthermore, an earlier onset is obsd., and the magnitude of the immune response is comparable to that seen with **vaccine** formulations contg. aluminum hydroxide as an **adjuvant**.

ST salt immunol **adjuvant parenteral vaccine**

IT Saponins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(MPL; **parenteral vaccine** formulations contg. **adjuvant** salts and their hydrates)

IT **Immunostimulants**
(**adjuvants; parenteral vaccine** formulations contg. **adjuvant** salts and their hydrates)

IT Phosphates, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(hydrogen; **parenteral vaccine** formulations contg. **adjuvant** salts and their hydrates)

IT Polyesters, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(hydroxycarboxylic acid-based; **parenteral vaccine** formulations contg. **adjuvant** salts and their hydrates)

IT **Drug delivery systems**
(**injections**, epicutaneous; **parenteral vaccine** formulations contg. **adjuvant** salts and their hydrates)

IT **Drug delivery systems**
(**injections, i.m.; parenteral vaccine** formulations contg. **adjuvant** salts and their hydrates)

IT **Drug delivery systems**
(**injections, i.p.; parenteral vaccine** formulations contg. **adjuvant** salts and their hydrates)

IT **Drug delivery systems**
(**injections, i.v.; parenteral vaccine** formulations contg. **adjuvant** salts and their hydrates)

IT **Drug delivery systems**
(**injections**, intra-articular; **parenteral vaccine** formulations contg. **adjuvant** salts and their hydrates)

IT **Drug delivery systems**
(**injections**, intradermal; **parenteral vaccine** formulations contg. **adjuvant** salts and their hydrates)

IT **Drug delivery systems**
(**injections, s.c.; parenteral**

vaccine formulations contg. **adjuvant** salts and their hydrates)

IT Salts, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(org.; **parenteral vaccine** formulations contg. **adjuvant** salts and their hydrates)

IT Buffers
Coloring materials
Dispersing agents
Human
Solubilizers
Vertebrata
(**parenteral vaccine** formulations contg. **adjuvant** salts and their hydrates)

IT Carbonates, reactions
Peroxides, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(**parenteral vaccine** formulations contg. **adjuvant** salts and their hydrates)

IT Hydroxides (inorganic)
Oxides (inorganic), biological studies
RL: RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)
(**parenteral vaccine** formulations contg. **adjuvant** salts and their hydrates)

IT Antigens
Diphosphates
Lecithins
Phosphates, biological studies
Polyolefins
Salts, biological studies
Saponins
Silicates, biological studies
Sulfates, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**parenteral vaccine** formulations contg. **adjuvant** salts and their hydrates)

IT **Vaccines**
(**parenteral; parenteral vaccine** formulations contg. **adjuvant** salts and their hydrates)

IT Alkaline earth metals
Group IVB elements
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(salts; **parenteral vaccine** formulations contg. **adjuvant** salts and their hydrates)

IT Toxoids
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(tetanus; **parenteral vaccine** formulations contg. **adjuvant** salts and their hydrates)

IT 144-55-8, Sodium hydrogen carbonate, biological studies 7647-14-5, Sodium chloride, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(buffer contg.; **parenteral vaccine** formulations contg. **adjuvant** salts and their hydrates)

IT 7439-95-4, Magnesium, reactions 7440-32-6, Titanium, reactions 7440-39-3, Barium, reactions 7440-67-7, Zirconium, reactions 7440-70-2, Calcium, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(**parenteral vaccine** formulations contg. **adjuvant** salts and their hydrates)

IT 471-34-1, Calcium carbonate, biological studies 513-77-9, Barium carbonate **546-93-0, Magnesium carbonate** 1304-29-6, Barium peroxide 1304-56-9, Beryllium oxide, biological

studies 1305-62-0, Calcium hydroxide, biological studies 1305-79-9, Calcium peroxide **1309-42-8, Magnesium hydroxide** 1309-48-4, Magnesium oxide, biological studies 1314-18-7, Strontium peroxide 1314-23-4, Zirconium dioxide, biological studies 1343-88-0, Magnesium silicate 1344-28-1, Aluminum oxide, biological studies 1633-05-2, Strontium carbonate 7429-90-5D, Aluminum, salts 7439-95-4D, Magnesium, salts 7440-14-4D, Radium, salts 7440-24-6D, Strontium, salts 7440-32-6D, Titanium, salts 7440-39-3D, Barium, salts 7440-58-6D, Hafnium, salts 7440-67-7D, Zirconium, salts 7440-70-2D, Calcium, salts 7487-88-9, Magnesium sulfate, biological studies 7727-43-7, Barium sulfate 7757-87-1, Trimagnesium phosphate 7757-93-9, Calcium hydrogen phosphate 7758-23-8, Calcium dihydrogen phosphate 7758-87-4, Tricalcium phosphate 7778-18-9, Calcium sulfate 7790-76-3, Calcium pyrophosphate 10034-77-2, Dicalcium silicate 10101-39-0 10101-41-4, Calcium sulfate dihydrate 10103-46-5, Calcium phosphate 12168-85-3, Tricalcium silicate **13463-67-7, Titanium dioxide**, biological studies 13693-11-3, Titanium disulfate 14066-20-7, Dihydrogen phosphate, biological studies 14452-57-4, Magnesium dioxide 14475-63-9, Zirconium hydroxide 14644-61-2, Zirconium sulfate 14987-04-3, Magnesium trisilicate 17194-00-2, Barium hydroxide 20427-58-1, Zinc hydroxide 21645-51-2, Aluminum hydroxide, biological studies **26780-50-7, Poly(lactide-co-glycolide) 34346-01-5, Glycolic acid-lactic acid** copolymer 53850-36-5D, Rutherfordium, salts 56378-72-4 **66594-14-7, Quil A 141256-04-4, Qs-21 172889-84-8, MF59**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**parenteral vaccine** formulations contg. **adjuvant** salts and their hydrates)

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD

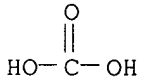
RE

(1) Alk-Abello AS; WO 0045847 A 2000 HCAPLUS
(2) Behringwerke; EP 0445710 A 1991 HCAPLUS
(3) Costagliola, S; ENDOCRINOLOGY 1994, V135(5), P2150 HCAPLUS
(4) Lee, J; INFECTION AND IMMUNITY 2000, V68(7), P4032 HCAPLUS
(5) Stas', N; KHIMIKO-FARMATSEVTICHESKII ZHURNAL 1990, V24(7), P65 HCAPLUS
(6) Wedrychowicz, H; VETERINARY PARASITOLOGY 1990, V37(3-4), P273 MEDLINE

IT **546-93-0, Magnesium carbonate 1309-42-8, Magnesium hydroxide 13463-67-7, Titanium dioxide**, biological studies **26780-50-7, Poly(lactide-co-glycolide) 34346-01-5, Glycolic acid-lactic acid** copolymer **66594-14-7, Quil A 141256-04-4, Qs-21 172889-84-8, MF59**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**parenteral vaccine** formulations contg. **adjuvant** salts and their hydrates)

RN 546-93-0 HCAPLUS

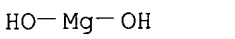
CN Carbonic acid, magnesium salt (1:1) (8CI, 9CI) (CA INDEX NAME)



● Mg

RN 1309-42-8 HCAPLUS

CN Magnesium hydroxide (Mg(OH)2) (9CI) (CA INDEX NAME)

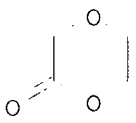


RN 13463-67-7 HCAPLUS
CN Titanium oxide (TiO2) (8CI, 9CI) (CA INDEX NAME)

RN 26780-50-7 HCAPLUS
CN 1,4-Dioxane-2,5-dione, 3,6-dimethyl-, polymer with 1,4-dioxane-2,5-dione (9CI) (CA INDEX NAME)

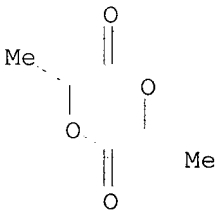
CM 1

CRN 502-97-6
CMF C4 H4 O4



CM 2

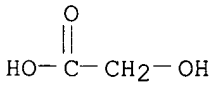
CRN 95-96-5
CMF C6 H8 O4



RN 34346-01-5 HCAPLUS
CN Propanoic acid, 2-hydroxy-, polymer with hydroxyacetic acid (9CI) (CA INDEX NAME)

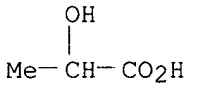
CM 1

CRN 79-14-1
CMF C2 H4 O3



CM 2

CRN 50-21-5
CMF C3 H6 O3

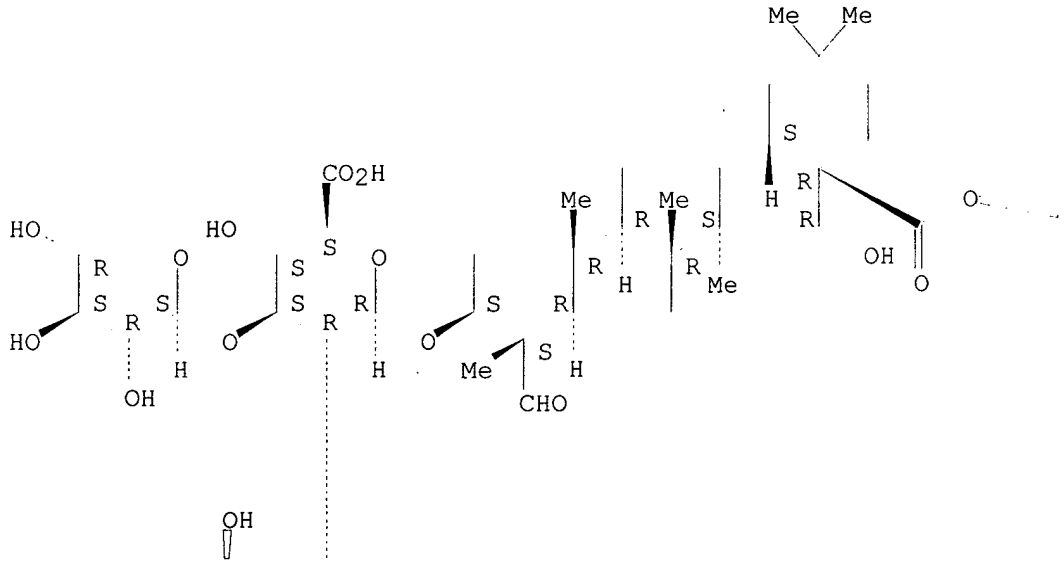


RN 66594-14-7 HCAPLUS
CN Quil-A (9CI) (CA INDEX NAME)

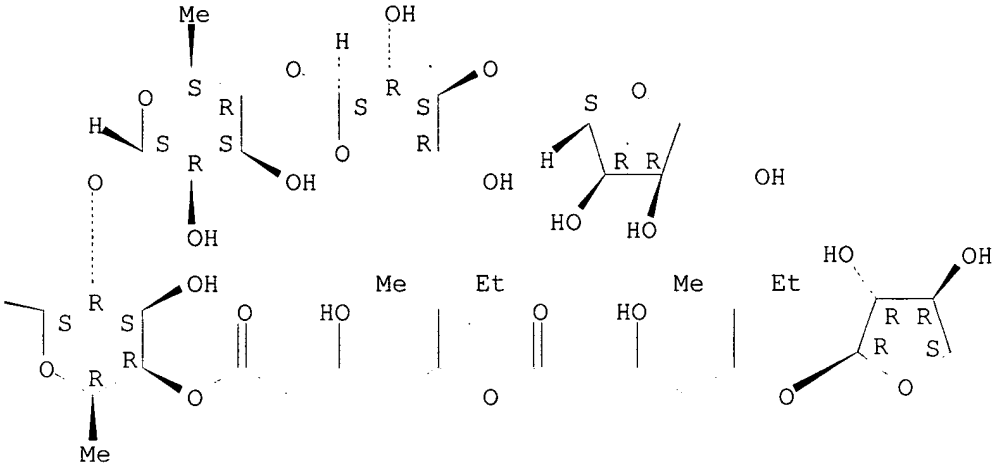
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 141256-04-4 HCAPLUS
CN .beta.-D-Glucopyranosiduronic acid, (3.beta.,4.alpha.,16.alpha.)-28-[[O-D-apio-.beta.-D-furanosyl-(1.fwdarw.3)-O-.beta.-D-xylopyranosyl-(1.fwdarw.4)-O-6-deoxy-.alpha.-L-mannopyranosyl-(1.fwdarw.2)-4-O-[5-[[5-(.alpha.-L-arabinofuranosyloxy)-3-hydroxy-6-methyl-1-oxooctyl]oxy]-3-hydroxy-6-methyl-1-oxooctyl]-6-deoxy-.beta.-D-galactopyranosyl]oxy]-16-hydroxy-23,28-dioxoolean-12-en-3-yl O-.beta.-D-galactopyranosyl-(1.fwdarw.2)-O-[.beta.-D-xylopyranosyl-(1.fwdarw.3)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



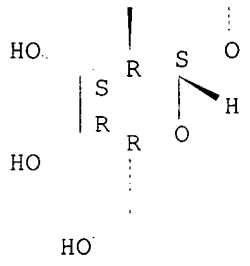
PAGE 1-B



PAGE 1-C

OH

PAGE 2-A



RN 172889-84-8 HCAPLUS
CN Sorbitan, tri-(9Z)-9-octadecenoate, mixt. with (2E,6E,10E,14E,18E,22E)-2,6,10,15,19,23-hexamethyl-2,6,10,14,18,22-tetracosahexaene and sorbitan mono-(9Z)-9-octadecenoate poly(oxy-1,2-ethanediyl) derivs. (9CI) (CA INDEX NAME)

CM 1

CRN 9005-65-6

CMF Unspecified
CCI PMS, MAN

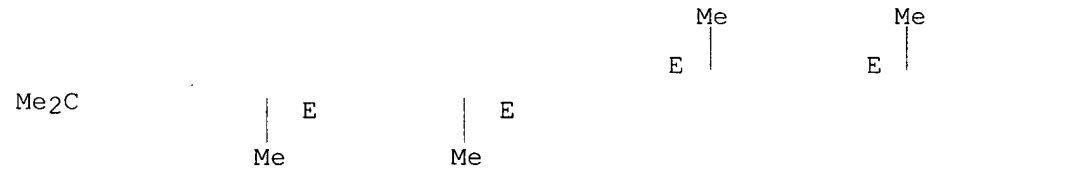
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 111-02-4
CMF C30 H50

Double bond geometry as shown.

PAGE 1-A



PAGE 1-B

CMe2

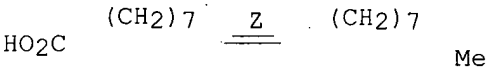
CM 3

CRN 1333-71-7
CMF C60 H110 O9
CCI IDS

CM 4

CRN 112-80-1
CMF C18 H34 O2

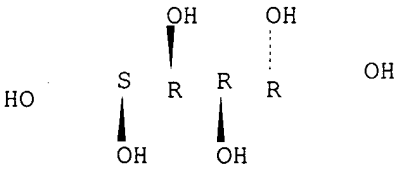
Double bond geometry as shown.



CM 5

CRN 50-70-4
CMF C6 H14 O6

Absolute stereochemistry.



L89 ANSWER 8 OF 19 HCAPLUS COPYRIGHT 2003 ACS
AN 2001:792223 HCAPLUS
DN 135:348878
TI Therapeutic treatment and prevention of infections with a bioactive materials encapsulated within a biodegradable-biocompatible polymeric matrix
IN Setterstrom, Jean A.; Van Hamont, John E.; Reid, Robert H.; Jacob, Elliot; Jeyanthi, Ramasubbu; Boedeker, Edgar C.; Mcqueen, Charles E.; Jarboe, Daniel L.; Cassels, Frederick; Brown, William; Thies, Curt; Tice, Thomas R.; Roberts, F. Donald; Friden, Phil
PA United States of America as Represented by the Secretary of the Army, USA
SO U.S., 141 pp., Cont.-in-part of U.S. Ser. No. 590,973, abandoned.
CODEN: USXXAM
DT Patent
LA English
IC A61K009-52; A61K047-30
NCL 424486000
CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 1
FAN.CNT 12

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6309669	B1	20011030	US 1997-789734	19970127
	US 5417986	A	19950523	US 1992-867301	19920410
	US 6410056	B1	20020625	US 1995-446148	19950522
	NZ 335409	A	20001222	NZ 1996-335409	19961118
	US 6447796	B1	20020910	US 1997-920326	19970821
	WO 9832427	A1	19980730	WO 1998-US1556	19980127
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9863175	A1	19980818	AU 1998-63175	19980127
PRAI	US 1984-590308	B1	19840316		
	US 1992-867301	A2	19920410		
	US 1995-446148	A2	19950522		
	US 1995-446149	B2	19950522		
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	US 1990-521945	B2	19900511		
	US 1991-690485	B2	19910424		
	US 1991-805721	B2	19911121		
	US 1994-209350	B2	19940107		
	US 1994-242960	A2	19940516		
	US 1996-675895	A2	19960705		
	US 1996-698896	A2	19960816		
	NZ 1996-325561	A1	19961118		
	US 1997-789734	A2	19970127		
	WO 1998-US1556	W	19980127		

AB Novel burst-free, sustained-release biocompatible and biodegradable microcapsules which can be programmed to release their active core for variable durations ranging from 1-100 days in an aq. physiol. environment are disclosed. The microcapsules are comprised of a core of polypeptide or other biol. active agent encapsulated in a matrix of poly(**lactide/glycolide**) **copolymer**, which may contain a pharmaceutically-acceptable **adjuvant**, as a blend of upcapped free carboxyl end group and end-capped forms ranging in ratios

from 100/0 to 1/99. Ampicillin microcapsules effectively prevented infection in 73% of rats whose wound were inoculated with ampicillin-resistant strains of Staphilococcus aureus, while systemic ampicillin failed in 100% of animals.

ST bioactive microcapsule biodegradable biocompatible polymer; ampicillin microcapsule polylactide polyglycolide

IT Antitumor agents
(Kaposi's sarcoma; therapeutic treatment and prevention of infections with bioactive materials encapsulated within biodegradable-biocompatible polymeric matrix)

IT **Immunostimulants**
(**adjuvants**; therapeutic treatment and prevention of infections with bioactive materials encapsulated within biodegradable-biocompatible polymeric matrix)

IT Rauvolfia
(alkaloid; therapeutic treatment and prevention of infections with bioactive materials encapsulated within biodegradable-biocompatible polymeric matrix)

IT Glycosides
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(amino; therapeutic treatment and prevention of infections with bioactive materials encapsulated within biodegradable-biocompatible polymeric matrix)

IT Drugs
(appetite stimulants; therapeutic treatment and prevention of infections with bioactive materials encapsulated within biodegradable-biocompatible polymeric matrix)

IT Natural products, pharmaceutical
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(belladonna; therapeutic treatment and prevention of infections with bioactive materials encapsulated within biodegradable-biocompatible polymeric matrix)

IT Polymers, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(biodegradable; therapeutic treatment and prevention of infections with bioactive materials encapsulated within biodegradable-biocompatible polymeric matrix)

IT Drug delivery systems
(capsules; therapeutic treatment and prevention of infections with bioactive materials encapsulated within biodegradable-biocompatible polymeric matrix)

IT Vasodilators
(coronary; therapeutic treatment and prevention of infections with bioactive materials encapsulated within biodegradable-biocompatible polymeric matrix)

IT Alkaloids, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(ergot; therapeutic treatment and prevention of infections with bioactive materials encapsulated within biodegradable-biocompatible polymeric matrix)

IT Amino acids, biological studies
Fats and Glyceridic oils, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(essential; therapeutic treatment and prevention of infections with bioactive materials encapsulated within biodegradable-biocompatible polymeric matrix)

IT Fatty acids, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(esters; therapeutic treatment and prevention of infections with bioactive materials encapsulated within biodegradable-biocompatible polymeric matrix)

IT Embryo, animal
(fetus; therapeutic treatment and prevention of infections with

bioactive materials encapsulated within biodegradable-biocompatible polymeric matrix)

IT Calymmatobacterium granulomatis
(granuloma inguinale from; therapeutic treatment and prevention of infections with bioactive materials encapsulated within biodegradable-biocompatible polymeric matrix)

IT Human herpesvirus 3
(herpes zoster from; therapeutic treatment and prevention of infections with bioactive materials encapsulated within biodegradable-biocompatible polymeric matrix)

IT Fertility
(inhibitors, non-steroidal; therapeutic treatment and prevention of infections with bioactive materials encapsulated within biodegradable-biocompatible polymeric matrix)

IT Disease, animal
(lymphopathia venerum; therapeutic treatment and prevention of infections with bioactive materials encapsulated within biodegradable-biocompatible polymeric matrix)

IT Antibiotics
(macrolide; therapeutic treatment and prevention of infections with bioactive materials encapsulated within biodegradable-biocompatible polymeric matrix)

IT Drug delivery systems
(microcapsules; therapeutic treatment and prevention of infections with bioactive materials encapsulated within biodegradable-biocompatible polymeric matrix)

IT Surfactants
(nonionic; therapeutic treatment and prevention of infections with bioactive materials encapsulated within biodegradable-biocompatible polymeric matrix)

IT Anti-inflammatory agents
(nonsteroidal; therapeutic treatment and prevention of infections with bioactive materials encapsulated within biodegradable-biocompatible polymeric matrix)

IT Nitrites
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(org.; therapeutic treatment and prevention of infections with bioactive materials encapsulated within biodegradable-biocompatible polymeric matrix)

IT Drug delivery systems
(prodrugs; therapeutic treatment and prevention of infections with bioactive materials encapsulated within biodegradable-biocompatible polymeric matrix)

IT Alkaloids, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(quinolone, fluoro-; therapeutic treatment and prevention of infections with bioactive materials encapsulated within biodegradable-biocompatible polymeric matrix)

IT Antitumor agents
(sarcoma; therapeutic treatment and prevention of infections with bioactive materials encapsulated within biodegradable-biocompatible polymeric matrix)

IT Drug delivery systems
(solns.; therapeutic treatment and prevention of infections with bioactive materials encapsulated within biodegradable-biocompatible polymeric matrix)

IT Muscle relaxants
(spasmolytics; therapeutic treatment and prevention of infections with bioactive materials encapsulated within biodegradable-biocompatible polymeric matrix)

IT Contraceptives
(spermicidal; therapeutic treatment and prevention of infections with bioactive materials encapsulated within biodegradable-biocompatible

polymeric matrix)
IT Appetite
(stimulants; therapeutic treatment and prevention of infections with bioactive materials encapsulated within biodegradable-biocompatible polymeric matrix)
IT Absidia ramosa
Actinobacillus equuli
Actinobacillus seminis
Adrenoceptor agonists
Allergy inhibitors
Analgesics
Anesthetics
Anti-inflammatory agents
Antiarrhythmics
Antibacterial agents
Antibiotics
Anticoagulants
Anticonvulsants
Antidepressants
Antiemetics
Antihistamines
Antihypertensives
Antimalarials
Antimigraine agents
Antiparkinsonian agents
Antipyretics
Antitumor agents
Antitussives
Antiviral agents
Appetite depressants
Arcanobacterium pyogenes
Aspergillus fumigatus
Babesia caballi
Bile
Blood plasma
Bovine herpesvirus 1
Bronchodilators
Brucella melitensis
Campylobacter fetus
Campylobacter fetus intestinalis
Candida albicans
Candida tropicalis
Cardiotonics
Cardiovascular agents
Cardiovascular system
Chlamydia psittaci
— Cholinergic agonists
Clostridium tetani
Contraceptives
Cytotoxic agents
Decongestants
Digesters
Diuretics
Electrolytes
Encapsulation
Equid herpesvirus 1
Equine arteritis virus
Escherichia coli
Expectorants
Fungicides
Gardnerella vaginalis
Haemophilus ducreyi
Human herpesvirus 1

Human herpesvirus 2
Hypnotics and Sedatives
Immunomodulators
Leptospira interrogans pomona
Listeria monocytogenes
Microorganism
Muscle relaxants
Mycobacterium tuberculosis
Mycoplasma bovigenitalium
Mycoplasma hominis
Narcotics
Neisseria gonorrhoeae
Nutrients
Opioid antagonists
Parasiticides
Pseudomonas aeruginosa
Psychotropics
Rhodococcus equi
Salmonella abortus
Salmonella abortusovis
Stabilizing agents
Streptocarpus
Surfactants
Toxoplasma gondii
Tranquilizers
Treponema pallidum
Trichomonas vaginalis
Tritrichomonas foetus
Trypanosoma equiperdum
Vaccines
Vasodilators
Wound healing
(therapeutic treatment and prevention of infections with bioactive materials encapsulated within biodegradable-biocompatible polymeric matrix)

IT Alkaloids, biological studies
Amino acids, biological studies
Antibodies
Antigens
Carbohydrates, biological studies
Enzymes, biological studies
Estrogens
Fatty acids, biological studies
Glycolipids
Glycols, biological studies
Glycopeptides
Glycoproteins, general, biological studies
Growth factors, animal
Hormones, animal, biological studies
Lipids, biological studies
Lipopolysaccharides
Peptides, biological studies
Pheromones, animal
Polysaccharides, biological studies
Progestogens
Prostaglandins
Proteins, general, biological studies
RNA
Steroids, biological studies
Sulfonamides
Tetracyclines
Vitamins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(therapeutic treatment and prevention of infections with bioactive materials encapsulated within biodegradable-biocompatible polymeric matrix)

IT Lactams
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(.beta.-; therapeutic treatment and prevention of infections with bioactive materials encapsulated within biodegradable-biocompatible polymeric matrix)

IT 9001-92-7, Protease
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(inhibitors; therapeutic treatment and prevention of infections with bioactive materials encapsulated within biodegradable-biocompatible polymeric matrix)

IT 9001-54-1, Hyaluronidase 9001-60-9, Lactic dehydrogenase
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(sperm; therapeutic treatment and prevention of infections with bioactive materials encapsulated within biodegradable-biocompatible polymeric matrix)

IT 50-06-6, Phenobarbital, biological studies 50-12-4, Mephenytoin 50-18-0, Cyclophosphamide 50-23-7, Hydrocortisone 50-24-8, Prednisolone 50-28-2, .beta.-Estradiol, biological studies 50-33-9, Phenylbutazone, biological studies 50-52-2, Thioridazine 50-55-5, Reserpine 50-78-2, Aspirin 51-55-8, Atropine, biological studies 52-24-4, Thiotepa 52-76-6, Lynestrenol 53-03-2, Prednisone 53-16-7, Estrone, biological studies 53-86-1, Indomethacin 54-11-5, Nicotine; 55-48-1, Atropine sulfate 55-63-0, Nitroglycerin 55-86-7, Nitrogen mustard 56-53-1, Diethyl stilbestrol 56-75-7, Chloramphenicol 57-27-2, Morphine, biological studies 57-33-0, Sodium pentobarbital 57-42-1, Meperidine 57-53-4, Meprobamate 57-63-6, Ethinyl estradiol 57-85-2, Testosterone propionate 57-92-1, Streptomycin A, biological studies 58-08-2, Caffeine, biological studies 58-14-0, Pyrimethamine 58-22-0, Testosterone 58-25-3, Chlordiazepoxide 58-39-9, Perphenazine 58-73-1, Diphenhydramine 59-01-8, Kanamycin A 59-05-2, Methotrexate 59-92-7, L-Dopa, biological studies 61-33-6, Penicillin G, biological studies 67-20-9, Nitro-furantoin 68-22-4, Norethindrone 68-23-5, Norethynodrel 69-53-4, Ampicillin 69-72-7D, Salicylic acid, derivs. 71-58-9, Medroxyprogesterone acetate 72-33-3, Mestranol 76-57-3, Codeine 78-11-5, Pentaerythritol tetranitrate 79-57-2, Oxytetracycline 79-64-1, Dimethisterone 91-81-6, Tripelennamine 103-90-2, Acetaminophen 113-15-5, Ergotamine 114-07-8, Erythromycin 114-49-8, Hyoscine hydrobromide 121-54-0, Benzethonium chloride 122-09-8, Phentermine 125-29-1, Dihydrocodeinone 125-71-3, Dextromethorphan 127-48-0, Trimethadione 128-62-1, Noscapine 145-94-8, Chlorindanol 155-41-9, Methscopolamine bromide 288-32-4D, Imidazole, derivs. 297-76-7, Ethynodiol diacetate 302-22-7, Chlormadinone acetate 305-03-3, Chlorambucil 309-43-3, Sodium secobarbital 315-30-0, Allopurinol 434-03-7, Ethisterone 439-14-5, Diazepam 443-48-1, Metronidazole 469-62-5 471-34-1, Calcium carbonate, biological studies 497-19-8, Sodium carbonate, biological studies 523-87-5, Dimenhydrinate **546-93-0, Magnesium carbonate** 578-66-5D, 8 Aminoquinoline, derivs. 578-68-7D, 4-Aminoquinoline, derivs. 595-33-5, Megestrol acetate 738-70-5, Trimethoprim 846-50-4, Temazepam 1397-89-3, Amphotericin-B 1397-94-0, Antimycin A 1403-66-3, Gentamicin 1404-26-8, Polymyxin-B; 1404-90-6, Vancomycin 1406-05-9, Penicillin 4696-76-8, Kanamycin B 5588-33-0, Mesoridazine 5633-18-1, Melengestrol 5786-21-0, Clozapine 5800-19-1, Metiapine 6533-00-2, Norgestrel 7447-40-7, Potassium chloride, biological studies 8063-07-8, Kanamycin 9000-83-3, Adenosine triphosphatase 9000-92-4, Amylase 9001-46-1, Glutamic acid dehydrogenase 9001-67-6, Neuraminidase 9001-78-9 9001-99-4, RNase 9002-07-7, Trypsin 9004-07-3, Chymotrypsin 9004-10-8, Insulin, biological studies 9005-63-4D, Polyoxyethylene sorbitan, fatty acid esters 9016-45-9, Polyethylene glycol nonylphenyl ether 9035-74-9, Glycogen phosphorylase 10118-90-8, Minocycline

11111-12-9, Cephalosporins 13292-46-1, Rifampin 14271-04-6
14271-05-7 21645-51-2, Aluminum hydroxide, biological studies
22232-71-9, Mazindol 24730-10-7, Dihydroergocristine methanesulfonate
25953-19-9, Cefazoline **26780-50-7**, **Poly(lactide-co-glycolide)** 30516-87-1
32986-56-4, Tobramycin 35189-28-7, Norgestimate 37517-28-5, Amikacin
53678-77-6, Muramyl dipeptide 53994-73-3, Cefaclor 55268-75-2, Cefuroxime 61036-62-2, Teicoplanin 64221-86-9, Imipenem 78110-38-0, Aztreonam 80738-43-8, Lincosamide 81103-11-9, Clarithromycin
82009-34-5, Cilastatin 82419-36-1, Ofloxacin 85721-33-1, Ciprofloxacin
123781-17-9, Histatin 189200-69-9, Polygen
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(therapeutic treatment and prevention of infections with bioactive materials encapsulated within biodegradable-biocompatible polymeric matrix)

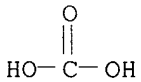
RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Anon; EP 052510 B2 1994 HCAPLUS
(2) Anon; Materials 1996, P351
(3) Bodmer; US 5538739 1996 HCAPLUS
(4) Bodmer; US 5639480 1997 HCAPLUS
(5) Bodmer; US 5688530 1997 HCAPLUS
(6) Cleland; US 5643605 1997 HCAPLUS
(7) Damani; US 5198220 1993 HCAPLUS
(8) Dunn; US 5707647 1998
(9) Dunn; US 5990194 1999 HCAPLUS
(10) Gardner; US 4637905 1987 HCAPLUS
(11) Gombotz; US 5942253 1999 HCAPLUS
(12) Hunter; US 5716981 1998 HCAPLUS
(13) Hunter; US 5886026 1999 HCAPLUS
(14) Hunter; US 5994341 1999 HCAPLUS
(15) Jeyanthi; Proceedings International Symposium on Controlled Release of Bioactive
(16) Kent; US 4675189 1987 HCAPLUS
(17) Wang; J of Controlled Release 1991, V17, P23 HCAPLUS
(18) Yan; J of Con Rel 1994, V32(3), P231 HCAPLUS
(19) Yeh; A Novel Emulsification-Solvent extraction Technique for Production of Protein Loaded Biodegradable Microparticles for vaccine and Drug Delivery 1995, V33(3), P437 HCAPLUS

IT **546-93-0**, **Magnesium carbonate**
26780-50-7, **Poly(lactide-co-glycolide)**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(therapeutic treatment and prevention of infections with bioactive materials encapsulated within biodegradable-biocompatible polymeric matrix)

RN 546-93-0 HCAPLUS
CN Carbonic acid, magnesium salt (1:1) (8CI, 9CI) (CA INDEX NAME)

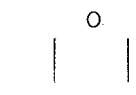


Mg

RN 26780-50-7 HCAPLUS
CN 1,4-Dioxane-2,5-dione, 3,6-dimethyl-, polymer with 1,4-dioxane-2,5-dione (9CI) (CA INDEX NAME)

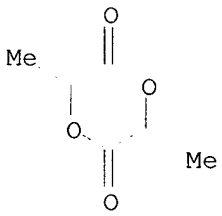
CM 1

CRN 502-97-6
CMF C4 H4 O4



CM 2

CRN 95-96-5
CMF C6 H8 O4



L89 ANSWER 9 OF 19 HCAPLUS COPYRIGHT 2003 ACS
AN **2001:780648** HCAPLUS
DN **135:335147**
TI Polymer-based **injectable** sustained release pharmaceutical compositions for peptide and protein drugs
IN Lee, Hee-yong; Lee, Hye-suk; Kim, Jung-soo; Kim, Sang-beom; Lee, Ji-suk; Choi, Ho-il; Chang, Seung-gu
PA Peptron Inc., S. Korea
SO PCT Int. Appl., 37 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K009-22
CC 63-6 (Pharmaceuticals)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001078687	A1	20011025	WO 2001-KR462	20010322
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	EP 1187602	A1	20020320	EP 2001-917893	20010322
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	US 2003026844	A1	20030206	US 2002-18870	20020418
PRAI	KR 2000-20484	A	20000418		
	KR 2000-49344	A	20000824		

WO 2001-KR462 W 20010322

AB Controlled and sustained release **injectable** pharmaceutical compns. for a biopharmaceutical, such as peptides and proteins are described. Processes for prepn. of an **injectable** sustained release compn. comprises (i) a step of prepg. biodegradable porous microspheres having accessible ionic functional groups, (ii) a step of encapsulating a biopharmaceutical into the microspheres through ionic interaction by suspending or equilibrating the microspheres in a soln. contg. the biopharmaceutical, and (iii) a step of recovering and freeze-drying the biopharmaceutical-incorporated microspheres. For example, microspheres were prepd. by water/oil/water double emulsion solvent evapn. method using a hydrophilic 50:50 PLGA polymer (RG 502H), which contains free carboxy end groups. Deionized water (800 mL) was added to 1 g of PLGA polymer dissolved in 2 mL of methylene chloride and emulsified by sonication for 30 s using a probe type ultrasonic generator. This primary emulsion was dispersed into 200 mL of deionized water contg. 0.5% polyvinyl alc. (wt./vol.) in a vessel which connected to a const. temp. controller and mixed well by stirring for 15 min at 2500 rpm, 25.degree. using a mixer. After mixing for another 15 min at 1500 rpm, 25.degree., temp. of continuous phase was increased to 40.degree. to evap. methylene chloride. After 1 h stirring at 40.degree., 1500 rpm, temp. was decreased to 25.degree.. The hardened microspheres were collected by centrifugation and washed twice with 200 mL of deionized water, and then freeze-dried. The microspheres obtained were used for incorporation of protein drugs, i.e., ovalbumin, bovine serum albumin, human growth hormone, RNase A, or lysozyme through ionic interaction by simply soaking and equilibrating the microspheres into a buffer soln. having an appropriate concn. of protein.

ST peptide protein polymer encapsulation controlled release microsphere; sustained release microsphere peptide protein **injection**

IT Proteins, specific or class
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(A; prepn. of polymer-based **injectable** sustained-release microspheres for peptide and protein drugs)

IT Proteins, specific or class
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(C-reactive; prepn. of polymer-based **injectable** sustained-release microspheres for peptide and protein drugs)

IT Proteins, specific or class
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(C; prepn. of polymer-based **injectable** sustained-release microspheres for peptide and protein drugs)

IT Apolipoproteins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(E; prepn. of polymer-based **injectable** sustained-release microspheres for peptide and protein drugs)

IT Acids, biological studies
RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(acidifying agents; prepn. of polymer-based **injectable** sustained-release microspheres for peptide and protein drugs)

IT Alkali metal hydroxides
RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(alkalizing agents; prepn. of polymer-based **injectable** sustained-release microspheres for peptide and protein drugs)

IT Quaternary ammonium compounds, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(alkylbenzyldimethyl, chlorides; prepn. of polymer-based **injectable** sustained-release microspheres for peptide and protein drugs)

IT Functional groups
Surfactants

(anionic; prepn. of polymer-based **injectable** sustained-release microspheres for peptide and protein drugs)
IT Antibodies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(anti-infective; prepn. of polymer-based **injectable** sustained-release microspheres for peptide and protein drugs)
IT **Vaccines**
(antigens; prepn. of polymer-based **injectable** sustained-release microspheres for peptide and protein drugs)
IT Polymers, biological studies
Polyurethanes, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(biodegradable; prepn. of polymer-based **injectable** sustained-release microspheres for peptide and protein drugs)
IT Polyesters, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(caprolactone-based; prepn. of polymer-based **injectable** sustained-release microspheres for peptide and protein drugs)
IT Growth factors, animal
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(cartilage-inducing factor; prepn. of polymer-based **injectable** sustained-release microspheres for peptide and protein drugs)
IT Surfactants
(cationic; prepn. of polymer-based **injectable** sustained-release microspheres for peptide and protein drugs)
IT Glycoproteins, specific or class
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(cytotoxic; prepn. of polymer-based **injectable** sustained-release microspheres for peptide and protein drugs)
IT Polyesters, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(dilactone-based; prepn. of polymer-based **injectable** sustained-release microspheres for peptide and protein drugs)
IT Lymphokines
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(erythroid-potentiating factors; prepn. of polymer-based **injectable** sustained-release microspheres for peptide and protein drugs)
IT B cell (lymphocyte)
T cell (lymphocyte)
(factors regulating; prepn. of polymer-based **injectable** sustained-release microspheres for peptide and protein drugs)
IT Polyesters, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(glycolide-based; prepn. of polymer-based **injectable** sustained-release microspheres for peptide and protein drugs)
IT Peptides, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(immunotherapeutic; prepn. of polymer-based **injectable** sustained-release microspheres for peptide and protein drugs)
IT Drug delivery systems
(immunotoxins; prepn. of polymer-based **injectable** sustained-release microspheres for peptide and protein drugs)
IT **Drug delivery systems**
(**injections**, controlled release; prepn. of polymer-based **injectable** sustained-release microspheres for peptide and protein drugs)
IT **Drug delivery systems**
(**injections, sustained release**; prepn. of polymer-based **injectable** sustained-release microspheres for peptide and protein drugs)
IT Polyesters, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(lactide; prepn. of polymer-based **injectable** sustained-release microspheres for peptide and protein drugs)

IT Annexins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(lipomodulin; prepn. of polymer-based **injectable** sustained-release microspheres for peptide and protein drugs)

IT Casting process
(low temp.; prepn. of polymer-based **injectable** sustained-release microspheres for peptide and protein drugs)

IT Cytokines
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(macrophage-activating factor; prepn. of polymer-based **injectable** sustained-release microspheres for peptide and protein drugs)

IT Encapsulation
(microencapsulation; prepn. of polymer-based **injectable** sustained-release microspheres for peptide and protein drugs)

IT Drug delivery systems
(microspheres, controlled-release; prepn. of polymer-based **injectable** sustained-release microspheres for peptide and protein drugs)

IT Polyethers, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(ortho ester group-contg.; prepn. of polymer-based **injectable** sustained-release microspheres for peptide and protein drugs)

IT Growth factors, animal
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(osteogenic growth factors; prepn. of polymer-based **injectable** sustained-release microspheres for peptide and protein drugs)

IT Macrophage
(peptides; prepn. of polymer-based **injectable** sustained-release microspheres for peptide and protein drugs)

IT Functional groups
(phosphoryl group; prepn. of polymer-based **injectable** sustained-release microspheres for peptide and protein drugs)

IT Polyamides, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(poly(amino acids); prepn. of polymer-based **injectable** sustained-release microspheres for peptide and protein drugs)

IT Polyesters, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(polyamide-; prepn. of polymer-based **injectable** sustained-release microspheres for peptide and protein drugs)

IT Polyamides, biological studies
Polyethers, biological studies
Polyoxyalkylenes, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(polyester-; prepn. of polymer-based **injectable** sustained-release microspheres for peptide and protein drugs)

IT Polyesters, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(polyether-; prepn. of polymer-based **injectable** sustained-release microspheres for peptide and protein drugs)

IT Polyesters, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(polyoxyalkylene-; prepn. of polymer-based **injectable** sustained-release microspheres for peptide and protein drugs)

IT Anti-infective agents
Antibacterial agents
Antiviral agents
Carboxyl group
Cryoprotectants
Evaporation

Fibrinolytics
Freeze drying
Particle size
Phase separation
Pulmonary surfactant
Solvent extraction
(prepn. of polymer-based **injectable** sustained-release microspheres for peptide and protein drugs)

IT Albumins, biological studies
Fibrins
Gelatins, biological studies
RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of polymer-based **injectable** sustained-release microspheres for peptide and protein drugs)

IT Annexins
Bone morphogenetic proteins
Caseins, biological studies
Collagens, biological studies
Fibrinogens
Hemoglobins
Interferons
Interleukin 1
Interleukins
Lymphotoxin
Ovalbumin
Platelet-derived growth factors
Polyanhydrides
Polycarbonates, biological studies
Polymer blends
Polysaccharides, biological studies
Proteins, general, biological studies
Transferrins
Transforming growth factors
Tumor necrosis factors
Zeins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of polymer-based **injectable** sustained-release microspheres for peptide and protein drugs)

IT Drying
(spray; prepn. of polymer-based **injectable** sustained-release microspheres for peptide and protein drugs)

IT Functional groups
(sulfonyl group; prepn. of polymer-based **injectable** sustained-release microspheres for peptide and protein drugs)

IT Extraction
(supercrit.; prepn. of polymer-based **injectable** sustained-release microspheres for peptide and protein drugs)

IT Antigens
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**vaccine**; prepn. of polymer-based **injectable** sustained-release microspheres for peptide and protein drugs)

IT 9001-99-4
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(A; prepn. of polymer-based **injectable** sustained-release microspheres for peptide and protein drugs)

IT 50-21-5, **Lactic acid**, biological studies 77-92-9, Citric acid, biological studies 79-14-1, **Glycolic acid**, biological studies 87-69-4, Tartaric acid, biological studies 110-17-8, Fumaric acid, biological studies 6915-15-7, Malic acid
RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(acidifying agent; prepn. of polymer-based **injectable**

sustained-release microspheres for peptide and protein drugs)

IT 102-71-6, Triethanolamine, biological studies 111-42-2, Diethanolamine, biological studies 141-43-5, Monoethanolamine, biological studies 144-55-8, Sodium bicarbonate, biological studies 471-34-1, Calcium carbonate, biological studies **546-93-0, Magnesium carbonate** 994-36-5, Sodium citrate 1309-48-4, Magnesium oxide, biological studies 6284-40-8, Meglumine 7778-49-6, Potassium citrate 14987-04-3, Magnesium trisilicate
RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(alkalizing agent; prepn. of polymer-based **injectable** sustained-release microspheres for peptide and protein drugs)

IT 9002-64-6, Parathyroid hormone
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(and inhibitors; prepn. of polymer-based **injectable** sustained-release microspheres for peptide and protein drugs)

IT 1066-33-7, Ammonium bicarbonate
RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(gas forming agent; prepn. of polymer-based **injectable** sustained-release microspheres for peptide and protein drugs)

IT 9001-12-1, Collagenase 9015-94-5, Renin, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(inhibitors; prepn. of polymer-based **injectable** sustained-release microspheres for peptide and protein drugs)

IT 105913-11-9, Plasminogen activator
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(kidney; prepn. of polymer-based **injectable** sustained-release microspheres for peptide and protein drugs)

IT 64-19-7, Acetic acid, biological studies 111-86-4, Octylamine 124-07-2, Caprylic acid, biological studies **1309-42-8, Magnesium hydroxide** 7647-14-5, Sodium chloride, biological studies 10043-52-4, Calcium chloride, biological studies
RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of polymer-based **injectable** sustained-release microspheres for peptide and protein drugs)

IT 121-54-0, Benzethonium chloride 151-21-3, Sodium lauryl sulfate, biological studies 577-11-7, Docusate sodium 1393-25-5, Secretin 1398-61-4, Chitin 1402-38-6, Oncostatin 8044-71-1, Cetrimide 9001-25-6, Blood-coagulation factor VII 9001-28-9, Factor IX 9001-63-2, Lysozyme 9002-01-1, Streptokinase 9002-60-2, Adrenocorticotrophic hormone, biological studies 9002-61-3, Human chorionic gonadotropin 9002-67-9, Luteinizing hormone 9002-68-0, Follicle stimulating hormone 9002-69-1, Relaxin 9002-71-5, Thyroid stimulating hormone 9002-72-6, Growth hormone 9002-89-5, Polyvinyl alcohol 9004-10-8, Insulin, biological studies 9004-53-9, Dextrin 9004-54-0, Dextran, biological studies 9004-61-9, Hyaluronic acid 9005-25-8, Starch, biological studies 9005-32-7, Alginic acid 9005-49-6, Heparin, biological studies 9007-12-9, Calcitonin 9007-27-6, Chondroitin 9007-92-5, Glucagon, biological studies 9011-97-6, Cholecystokinin 9012-76-4, Chitosan 9015-71-8, Corticotropin releasing factor 9034-39-3, Growth hormone releasing factor 9035-68-1, Proinsulin 9039-53-6, Urokinase 9041-92-3, .alpha.1-Antitrypsin 9054-89-1, Superoxide dismutase 9056-36-4, Keratan sulfate 9061-61-4, Nerve growth factor 11096-26-7, Erythropoietin 15802-18-3D, Cyanoacrylic acid, esters, polymers 24980-41-4, Polycaprolactone 25104-18-1, Poly(L-lysine) 25248-42-4, Polycaprolactone 25868-59-1 25931-47-9 26009-03-0, Polyglycolide 26023-30-3, Poly[oxy(1-methyl-2-oxo-1,2-ethanediyl)] 26202-08-4, Polyglycolide 26680-10-4, Polylactide **26780-50-7, Poly(lactide-co-glycolide)** 31621-87-1,

Polydioxanone **34346-01-5**, Resomer RG 502H 37221-79-7, Vasoactive intestinal polypeptide 38000-06-5, Poly(L-lysine) 52906-92-0, Motilin 57285-09-3, Inhibin 59392-49-3, Gastric inhibitory peptide 59763-91-6, Pancreatic polypeptide 61912-98-9, Insulin-like growth factor 62229-50-9, Epidermal growth factor 62683-29-8, Colony stimulating factor 67763-96-6, Somatomedin C 77272-10-7, Macrocortin 80043-53-4, Gastrin releasing peptide 82657-92-9, Prourokinase 83652-28-2, Calcitonin gene-related peptide 85637-73-6, Atrial natriuretic factor 113189-02-9, Antihemophilic factor 139639-23-9, Tissue plasminogen activator
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of polymer-based **injectable** sustained-release microspheres for peptide and protein drugs)

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD

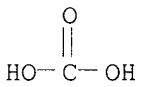
RE

(1) Bodmer; In J Controlled Release 1992, V211-3, P129
(2) Syntex Inc; US 5470582 1995 HCAPLUS

IT **546-93-0, Magnesium carbonate**
RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(alkalizing agent; prepn. of polymer-based **injectable** sustained-release microspheres for peptide and protein drugs)

RN 546-93-0 HCAPLUS

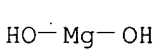
CN Carbonic acid, magnesium salt (1:1) (8CI, 9CI) (CA INDEX NAME)



IT **1309-42-8, Magnesium hydroxide**
RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of polymer-based **injectable** sustained-release microspheres for peptide and protein drugs)

RN 1309-42-8 HCAPLUS

CN Magnesium hydroxide (Mg(OH)2) (9CI) (CA INDEX NAME)



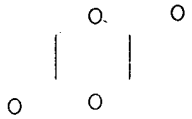
IT **26780-50-7, Poly(lactide-co-glycolide) 34346-01-5**, Resomer RG 502H
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of polymer-based **injectable** sustained-release microspheres for peptide and protein drugs)

RN 26780-50-7 HCAPLUS

CN 1,4-Dioxane-2,5-dione, 3,6-dimethyl-, polymer with 1,4-dioxane-2,5-dione (9CI) (CA INDEX NAME)

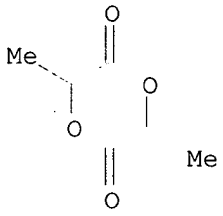
CM 1

CRN 502-97-6
CMF C4 H4 O4



CM 2

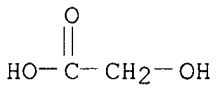
CRN 95-96-5
CMF C6 H8 O4



RN 34346-01-5 HCAPLUS
CN Propanoic acid, 2-hydroxy-, polymer with hydroxyacetic acid (9CI) (CA INDEX NAME)

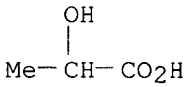
CM 1

CRN 79-14-1
CMF C2 H4 O3



CM 2

CRN 50-21-5
CMF C3 H6 O3



L89 ANSWER 10 OF 19 HCAPLUS COPYRIGHT 2003 ACS
AN 2001:564791 HCAPLUS
DN 135:121657
TI Composition for intestinal delivery
IN Vandenberg, Grant William
PA Aqua Solution Inc., Can.
SO PCT Int. Appl., 62 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A23K001-14

ICS A23K001-16; A23K001-175; A61K047-12; A61K047-18
CC 18-6 (Animal Nutrition)
Section cross-reference(s): 17, 63
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001054514	A1	20010802	WO 2001-CA73	20010125
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	EP 1250056	A1	20021023	EP 2001-902185	20010125
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	NO 2002003464	A	20020924	NO 2002-3464	20020719
PRAI	US 2000-178318P	P	20000127		
	WO 2001-CA73	W	20010125		

AB The present invention relates to a new compn., use and method for oral administration to a human or an animal of a physiol. active agent comprising neutralizing agents to increase pH in the digestive system to prevent denaturation, inhibitors of digestive enzymes to substantially prevent enzymic digestion, and at least uptake-increasing agents which increases intestinal absorption of a physiol. active agent, a drug and/or a nutrient.

ST intestine delivery system nutrient drug; fish feeding expt somatotropin

IT Plasmids
(DNA vectors; compn. for intestinal delivery of nutrients and drugs)

IT Antihistamines
(H2; compn. for intestinal delivery of nutrients and drugs)

IT **Immunostimulants**
(**adjuvants**; compn. for intestinal delivery of nutrients and drugs)

IT Glycosides
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(amino; compn. for intestinal delivery of nutrients and drugs)

IT Fats and Glyceridic oils, biological studies
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(animal; compn. for intestinal delivery of nutrients and drugs)

IT Nutrients
(anti-; compn. for intestinal delivery of nutrients and drugs)

IT Macrolides
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antibiotics; compn. for intestinal delivery of nutrients and drugs)

IT Gene, animal
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antigenes; compn. for intestinal delivery of nutrients and drugs)

IT Rice (Oryza sativa)
(bran, physiol. active compds. from; compn. for intestinal delivery of nutrients and drugs)

IT Actinobacillus
Analgesics
Antacids
Anti-inflammatory agents
Antibacterial agents

Antibiotics
Antioxidants
Antitumor agents
Bacilli
Bacteria (Eubacteria)
Bacteroides
Bean (Phaseolus vulgaris)
Binders
Bird (Aves)
Brewers' yeast
Campylobacter
Capnocytophaga
Chlamydia
Clostridium
Coliform bacteria
Coloring materials
Corynebacterium
Drug delivery systems
Eikenella
Enterococcus
Erysipelothrix
Eubacterium
Feed additives
Feeding experiment
Fish
Flavor
Flavoring materials
Food additives
Food preservatives
Fungicides
Fusobacteria
Haemophilus
Immunostimulants
Insect (Insecta)
Klebsiella
Lactobacillus
Listeria
Livestock
Lubricants
Mammal (Mammalia)
Micrococcus
Mitsuokella
Moraxella
Mushroom
Mycoplasma
Neisseria
Nutrients
Oncorhynchus mykiss
Parasiticides
Pasteurella
Peptococcus
Peptostreptococcus
Porphyromonas
Poultry
Preservatives
Prevotella
Propionibacterium
Salvelinus fontinalis
Staphylococcus
Streptococcus
Streptomyces
Surfactants
Sweetening agents

Toxicants
Tracers
Treponema
Ureaplasma
Vaccines
Veillonella
Virus
Yeast
(compn. for intestinal delivery of nutrients and drugs)

IT Albumins, biological studies
Antibodies
Bacteriocins
Bile salts
Blood-coagulation factors
Carbohydrates, biological studies
Enzymes, biological studies
Growth promoters, animal
Hormones, animal, biological studies
Hydrocarbon oils
Immunoglobulins
Interferons
Interleukins
Lecithins
Lipids, biological studies
Lysophosphatidylcholines
Mucopolysaccharides, biological studies
Neurotransmitters
Neurotrophic factors
Ovalbumin
Peptides, biological studies
Proteins, general, biological studies
Saponins
Steroids, biological studies
Sulfonamides
Tetracyclines
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(compn. for intestinal delivery of nutrients and drugs)

IT Enzymes, biological studies
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(digestive, inhibitors of; compn. for intestinal delivery of nutrients and drugs)

IT Acidity
(drugs increasing; compn. for intestinal delivery of nutrients and drugs)

IT Growth promoters, animal
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(epithelial; compn. for intestinal delivery of nutrients and drugs)

IT Angiogenic factors
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(factors inhibiting; compn. for intestinal delivery of nutrients and drugs)

IT Cell differentiation
Cell proliferation
(factors; compn. for intestinal delivery of nutrients and drugs)

IT Fats and Glyceridic oils, biological studies
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(fish; compn. for intestinal delivery of nutrients and drugs)

IT Nucleic acids
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological

study); USES (Uses)
(fragments; compn. for intestinal delivery of nutrients and drugs)

IT Growth promoters, animal
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(nerve growth factor; compn. for intestinal delivery of nutrients and drugs)

IT Neurohormones
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(neuromodulators; compn. for intestinal delivery of nutrients and drugs)

IT Seed
(oilseed, physiol. active compds. from; compn. for intestinal delivery of nutrients and drugs)

IT Drug delivery systems
(ointments; compn. for intestinal delivery of nutrients and drugs)

IT Broad bean (Vicia faba)
Kidney bean
Soybean (Glycine max)
Wheat bran
(physiol. active compds. from; compn. for intestinal delivery of nutrients and drugs)

IT Intestinal bacteria
(probiotic; compn. for intestinal delivery of nutrients and drugs)

IT Proliferation inhibition
(proliferation inhibitors; compn. for intestinal delivery of nutrients and drugs)

IT Bran
(rice, physiol. active compds. from; compn. for intestinal delivery of nutrients and drugs)

IT Biological transport
(uptake, agents for improvement of; compn. for intestinal delivery of nutrients and drugs)

IT Growth promoters, animal
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(vascular endothelial growth and permeability factor; compn. for intestinal delivery of nutrients and drugs)

IT Fats and Glyceridic oils, biological studies
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(vegetable; compn. for intestinal delivery of nutrients and drugs)

IT 302-95-4, sodium deoxycholate 351199-09-2, Oralject
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(compn. for intestinal delivery of nutrients and drugs)

IT 54-21-7, Sodium salicylate 56-75-7, Chloramphenicol 60-00-4, EDTA, biological studies 60-33-3, Linoleic acid, biological studies 60-54-8D, Tetracycline, derivs. 66-79-5, Oxacillin 69-53-4, Ampicillin 83-44-3, Deoxycholic acid 91-22-5D, Quinoline, fluoro derivs., biological studies 112-80-1, Oleic acid, biological studies 114-07-8, Erythromycin 144-55-8, Sodium bicarbonate, biological studies 147-52-4, Nafcillin 151-21-3, Sodium lauryl sulfate, biological studies 153-61-7, Cephalothin 154-21-2, Lincomycin 471-34-1, Calcium carbonate, biological studies 497-19-8, Sodium carbonate, biological studies **546-93-0, Magnesium carbonate** 994-36-5, Sodium citrate **1309-42-8, Magnesium hydroxide** 1309-48-4, Magnesium oxide, biological studies 1403-66-3, Gentamicin 1404-26-8, Polymyxin B 1404-90-6, Vancomycin 1406-05-9, Penicillin 4697-36-3, Carbenicillin 5892-10-4, Bismuth subcarbonate 7439-95-4D, Magnesium, salts, biological studies 9002-72-6, Growth hormone 9002-93-1 9005-63-4D, Polyoxyethylene sorbitan, esters 9034-39-3, Somatoliberin 9041-92-3 10043-83-1,

Magnesium phosphate 10103-46-5, Calcium phosphate 13292-46-1, Rifampin 14987-04-3, Magnesium trisilicate 15686-71-2, Cephalexin 18323-44-9, Clindamycin 25496-72-4, Monoolein 26787-78-0, Amoxicillin 32986-56-4, Tobramycin 34787-01-4, Ticarcillin 37091-66-0, Azlocillin 51481-65-3, Mezlocillin 56391-56-1, Netilmicin 59227-89-3 61477-96-1, Piperacillin 64221-86-9, Imipenen 68401-81-0, Ceftizoxime 69227-93-6, Lauryl-.beta.-D-maltopyranoside 72558-82-8, Ceftazidime 73384-59-5, Ceftriaxone 78110-38-0, Aztreonam 81103-11-9, Clarithromycin 83869-56-1, GMCSF 83905-01-5, Azithromycin
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(compn. for intestinal delivery of nutrients and drugs)

IT 9001-75-6, Pepsin 9014-74-8, Enteropeptidase
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(inhibitors of; compn. for intestinal delivery of nutrients and drugs)

IT 9001-92-7, proteinase
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(inhibitors; compn. for intestinal delivery of nutrients and drugs)

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

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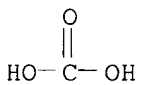
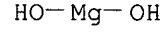
IT **546-93-0, Magnesium carbonate**
1309-42-8, Magnesium hydroxide
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(compn. for intestinal delivery of nutrients and drugs)

RN 546-93-0 HCAPLUS
CN Carbonic acid, magnesium salt (1:1) (8CI, 9CI) (CA INDEX NAME)



RN 1309-42-8 HCAPLUS
CN Magnesium hydroxide (Mg(OH)2) (9CI) (CA INDEX NAME)



L89 ANSWER 11 OF 19 HCAPLUS COPYRIGHT 2003 ACS
AN **2000:36953** HCAPLUS
DN **132:185360**
TI Stabilization of proteins encapsulated in **injectable poly(lactide-co-glycolide)**

AU Zhu, Gaozhong; Mallery, Susan R.; Schwendeman, Steven P.
CS Colleges of Pharmacy and of Dentistry, The Ohio State University, Columbus, OH, 43210, USA
SO Nature Biotechnology (2000), 18(1), 52-57
CODEN: NABIF9; ISSN: 1087-0156
PB Nature America
DT Journal
LA English
CC 63-6 (Pharmaceuticals)
AB Controlled release from biodegradable polymers is a novel approach to replace daily painful **injections** of protein drugs. A major obstacle to development of these polymers is the need to retain the structure and biol. activity of encapsulated proteins during months of incubation under physiol. conditions. We encapsulated bovine serum albumin (BSA) in **injectable poly**(DL-**lactide-co-glycolide**) (PLGA) 50/50 cylindrical implants and detd. the mechanism of BSA instability. Simulations of the polymer microclimate revealed that moisture and acidic pH (<3) triggered unfolding of encapsulated BSA, resulting in peptide bond hydrolysis and noncovalent aggregation. To neutralize the acids liberated by the biodegradable lactic/**glycolic acid**-based polyester, we coincorporated into the polymer an antacid, **Mg**(**OH**)**2**, which increased microclimate pH and prevented BSA structural losses and aggregation for over 1 mo. We successfully applied this stabilization approach in both cylinder- and microsphere-**injectable** configurations and for delivery of angiogenic basic fibroblast growth factor and bone-regenerating bone morphogenetic protein-2.
ST stabilization protein polylactide polyglycolide; controlled release microsphere polyester stabilization protein
IT Bone morphogenetic proteins
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(2; stabilization of proteins encapsulated in **injectable poly**(**lactide-co-glycolide**))
IT Polyesters, biological studies
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(dilactone-based; stabilization of proteins encapsulated in **injectable poly**(**lactide-co-glycolide**))
IT Drug delivery systems
(implants; stabilization of proteins encapsulated in **injectable poly**(**lactide-co-glycolide**))
IT Drug delivery systems
(microspheres, controlled-release; stabilization of proteins encapsulated in **injectable poly**(**lactide-co-glycolide**))
IT Albumins, biological studies
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(serum; stabilization of proteins encapsulated in **injectable poly**(**lactide-co-glycolide**))
IT Dissolution rate
Encapsulation
(stabilization of proteins encapsulated in **injectable poly**(**lactide-co-glycolide**))
IT Proteins, general, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(stabilization of proteins encapsulated in **injectable poly**(**lactide-co-glycolide**))

IT 106096-93-9, Basic fibroblast growth factor
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(stabilization of proteins encapsulated in **injectable poly(lactide-co-glycolide)**)
IT **1309-42-8, Magnesium hydroxide**
26780-50-7, Poly(DL-**lactide-co-glycolide**)
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(stabilization of proteins encapsulated in **injectable poly(lactide-co-glycolide)**)
RE.CNT 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
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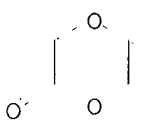
IT **1309-42-8, Magnesium hydroxide**
26780-50-7, Poly(DL-**lactide-co-glycolide**)
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(stabilization of proteins encapsulated in **injectable poly**(**lactide-co-glycolide**))
RN 1309-42-8 HCAPLUS
CN Magnesium hydroxide (Mg(OH)2) (9CI) (CA INDEX NAME)

RN 26780-50-7 HCAPLUS
CN 1,4-Dioxane-2,5-dione, 3,6-dimethyl-, polymer with 1,4-dioxane-2,5-dione (9CI) (CA INDEX NAME)

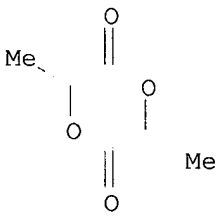
CM 1

CRN 502-97-6
CMF C4 H4 O4



CM 2

CRN 95-96-5
CMF C6 H8 O4



L89 ANSWER 12 OF 19 HCAPLUS COPYRIGHT 2003 ACS
AN 1998:527193 HCAPLUS
DN 129:166193
TI Therapeutic treatment and prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix
IN Setterstrom, Jean A.; Van Hamont, John E.; Reid, Robert H.; Jacob, Elliot; Jeyanthi, Ramasubbu; Boedeker, Edgar C.; McQueen, Charles E.; Tice, Thomas R.; Roberts, F. Donald; Friden, Phil
PA United States Dept. of the Army, USA; Van Hamont, John E.; et al.
SO PCT Int. Appl., 363 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K009-52

ICS A61K047-30
CC 63-5 (Pharmaceuticals)
Section cross-reference(s): 1, 2, 15
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	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9832427	A1	19980730	WO 1998-US1556	19980127
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	US 6309669	B1	20011030	US 1997-789734	19970127
	AU 9863175	A1	19980818	AU 1998-63175	19980127
PRAI	US 1997-789734	A	19970127		
	US 1984-590308	B1	19840316		
	US 1992-867301	A2	19920410		
	US 1995-446148	A2	19950522		
	US 1995-446149	B2	19950522		
	US 1996-590973	B2	19960124		
	WO 1998-US1556	W	19980127		

AB Novel burst-free, sustained release biocompatible and biodegradable microcapsules are disclosed which can be programmed to release their active core for variable durations ranging from 1-100 days in an aq. physiol. environment. The microcapsules are comprised of a core of polypeptide or other biol. active agent encapsulated in a matrix of poly(**lactide/glycolide**) **copolymer**, which may contain a pharmaceutically acceptable **adjuvant**, as a blend of upcapped free carboxyl end group and end-capped forms ranging in ratios from 100/0 to 1/99.

ST infection microcapsule sustained release peptide copolymer

IT Hepatitis
(B, chronic; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)

IT Hepatitis
(C, chronic; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)

IT Trypanosoma cruzi
(Chagas' disease from; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)

IT Immunoglobulins
RL: BOC (Biological occurrence); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence); PROC (Process)
(G, ampicillin-specific; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)

IT Nervous system
(Huntington's chorea; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)

IT Antitumor agents
Antitumor agents
(Kaposi's sarcoma; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)

IT Sperm
(acrosome, proteinase of; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)

IT Diagnosis
(agents; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Ragweed (Ambrosia)
(allergy; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Ameba
(amebiasis; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Antibiotics
(aminoglycoside; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Absidia ramosa
Actinobacillus equuli
Actinobacillus seminis
Arcanobacterium pyogenes
Aspergillus fumigatus
Babesia caballi
Brucella melitensis
Campylobacter fetus
Campylobacter fetus intestinalis
Candida albicans
Candida tropicalis
Chlamydia psittaci
Clostridium tetani
Equid herpesvirus 1
Equine arteritis virus
Escherichia coli
Gardnerella vaginalis
Human herpesvirus 1
Human herpesvirus 2
Leptospira interrogans pomona
Listeria monocytogenes
Mycobacterium tuberculosis
Mycoplasma bovigenitalium
Mycoplasma hominis
Neisseria gonorrhoeae
Pneumocystis carinii
Pseudomonas aeruginosa
Rhodococcus equi
Salmonella abortivoequina
Salmonella abortusovis
Streptococcus group B
Toxoplasma gondii
Treponema pallidum
Trichomonas vaginalis
Tritrichomonas foetus
Trypanosoma equiperdum
(antigens of; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Mycobacterium
(antimycobacterial agents; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Mouth
Mouth
(aphthous ulcer; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Drugs
Drugs
(appetite stimulants; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)

IT Heart, disease
(arrhythmia; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Blood vessel
(artificial, infections surrounding; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Dermatitis
(atopic; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Babesia
(babesiasis; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Skin, neoplasm
Skin, neoplasm
(basal cell carcinoma, inhibitors; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Antitumor agents
Antitumor agents
Skin, neoplasm
(basal cell carcinoma; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Natural products, pharmaceutical
RL: BPR (Biological process); BSU (Biological study, unclassified); DEV (Device component use); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(belladonna; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Prostate gland
(benign hyperplasia; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Polymers, biological studies
RL: DEV (Device component use); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(biodegradable; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Nervous system
(central, disease; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Polymers, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); DEV (Device component use); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(co-; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Intestine, disease
(colitis; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Antigens
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(colony factor; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Intestine, neoplasm
Intestine, neoplasm
(colorectal, inhibitors; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)

IT Antitumor agents
Antitumor agents
Intestine, neoplasm
(colorectal; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Thrombosis
(coronary arterial; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Artery, disease
(coronary, thrombosis; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Vasodilators
(coronary; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Tapeworm (Cestoda)
(cysticercosis; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Bladder
(cystitis; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Mental disorder
(depression; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Eye, disease
(diabetic retinopathy; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Polyesters, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); DEV (Device component use); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(dilactone-based; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Digestive tract
(drugs for; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Brain, disease
(edema, peritumoral; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Drug delivery systems
(emulsions; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT B cell (lymphocyte)
T cell (lymphocyte)
(epitopes of; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Alkaloids, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); DEV (Device component use); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(ergot; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Amino acids, biological studies
Fats and Glyceridic oils, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); DEV (Device component use); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(essential; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)

IT Fasciola
(fascioliasis; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Filaria
(filariasis; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Anthelmintics
(filaricides; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Digestive tract
(gastroenteritis, virus causing; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Intestine, disease
(giardiasis; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Transplant and Transplantation
(graft-vs.-host reaction; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Calymmatobacterium granulomatis
(granuloma inguinale from, antigens of; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Antigens
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(hepatitis B surface; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Liver, neoplasm
(hepatoma, inhibitors; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Antitumor agents
Liver, neoplasm
(hepatoma; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Human herpesvirus 2
(herpes genitalis from; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Human herpesvirus 3
(herpes zoster from, antigens of; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Parvovirus
Retroviridae
(human; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Globulins, biological studies
RL: BPN (Biosynthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(hyperimmune; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Sexual behavior
(impotence; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Eye, disease
Eye, disease
Mouth
Mouth
Skin, disease

(infection; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Prosthetic materials and Prosthetics
(infections surrounding; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Drug delivery systems
(inhalants; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Fertility
Ovary, neoplasm
Pancreas, neoplasm
Pancreas, neoplasm
(inhibitors; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT **Drug delivery systems**
(**injections**; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Diabetes mellitus
(insulin-dependent; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Leishmania
(leishmaniasis from, visceral; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Antitumor agents
(lung small-cell carcinoma; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Antibiotics
(macrolide; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Antitumor agents
(mammary gland; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Antitumor agents
(melanoma; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Drug delivery systems
(microcapsules; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Drug delivery systems
(microspheres; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Drug delivery systems
(nasal; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Mammary gland
Prostate gland
(neoplasm, inhibitors; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Mammary gland
Prostate gland
(neoplasm; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Meningitis
(neoplastic; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Angiogenesis
Angiogenesis
Angiogenesis

(neovascularization, retinal; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Diabetes mellitus
(non-insulin-dependent; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Anti-inflammatory agents
(nonsteroidal; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Emulsions
(oil-in-water; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Drug delivery systems
(oral; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Nitrites
RL: BPR (Biological process); BSU (Biological study, unclassified); DEV (Device component use); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(org.; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Antitumor agents
(ovary; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Antitumor agents
Antitumor agents
(pancreas; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Anxiety
(panic disorder; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Paragonimus
(paragonimiasis; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Hormones, animal, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); DEV (Device component use); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(peptide; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Periodontium
(periodontitis; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Mental disorder
(phobia; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Adhesion, biological
(postsurgical; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT AIDS (disease)
Acinetobacter
Actinomycetales
Adenoviridae
Adrenoceptor agonists
Aerococcus
Aeromonas
Allergy inhibitors
Alzheimer's disease
Analgesics
Anesthetics

Angiogenesis
Angiogenesis inhibitors
Anthelmintics
Anti-infective agents
Anti-inflammatory agents
Antiarrhythmics
Antiarthritics
Antibacterial agents
Antibiotics
Anticholesteremic agents
Anticoagulants
Anticoagulants
Anticonvulsants
Antidepressants
Antidiabetic agents
Antidiarrheals
Antiemetics
Antihistamines
Antihypertensives
Antimalarials
Antimigraine agents
Antiparkinsonian agents
Antipyretics
Antirheumatic agents
Antiserums
Antitumor agents
Antitussives
Antiulcer agents
Antiviral agents
Appetite depressants
Arbovirus
Arcanobacterium haemolyticum
Arenavirus
Asthma
Bacillus (bacterium genus)
Biocompatibility
Blood substitutes
Bordetella
Borrelia
Bronchodilators
Brucella
Cachexia
Calymmatobacterium
Campylobacter
Cardiopulmonary bypass
Cardiotonics
Cardiovascular agents
Cholinergic agonists
Clostridium
Contraceptives
Coronavirus
Corynebacterium
Cryptosporidium parvum
Cystic fibrosis
Cytomegalovirus
Cytotoxic agents
Decongestants
Diagnosis
Diarrhea
Dissolution rate
Diuretics
Drug bioavailability
Drug dependence

Ebola virus
Echinococcus
Electrolytes, biological
Emulsifying agents
Enterobacteriaceae
Enterococcus
Enterovirus
Epitopes
Erysipelothrix
Expectorants
Filovirus
Flavobacterium
Freeze drying
Fungicides
Gardnerella
Gram-negative bacteria
Gram-positive bacteria (Firmicutes)
Haemophilus
Haemophilus ducreyi
Helicobacter
Hepatitis A virus
Hepatitis B virus
Hepatitis C virus
Human herpesvirus 3
Human herpesvirus 4
Human immunodeficiency virus
Human immunodeficiency virus 1
Human parainfluenza virus
Human poliovirus
Hypercholesterolemia
Hypnotics and Sedatives
Immunization
Immunomodulators
Immunostimulants
Infection
Influenza virus
Kidney, disease
Lactococcus
Legionella
Leptospira
Leuconostoc
Listeria
Measles virus
Melanoma
Micrococcus
Molluscum contagiosum virus
Moraxella
Multiple sclerosis
Mumps virus
Muscle relaxants
Narcotics
Neisseria
Nervous system agents
Nutrients
Opioid antagonists
Osteoarthritis
Osteomyelitis
Osteoporosis
Ovary, neoplasm
Pancreas, neoplasm
Papillomavirus
Parasiticides
Parkinson's disease

Pediococcus
Planococcus (bacterium)
Plesiomonas
Pneumonia
Poxviridae
Pseudomonas
Psoriasis
Psychotropics
Rabies virus
Reoviridae
Respiratory syncytial virus
Rheumatoid arthritis
Rhinovirus
Rhodococcus
Rotavirus
Rothia (bacterium)
Rubella virus
Salmonella typhi
Sexually transmitted diseases
Shigella boydii
Shigella dysenteriae
Shigella flexneri
Shigella sonnei
Spirillum
Staphylococcus
Streptobacillus
Streptococcus
Thrombosis
Tranquilizers
Treponema
Vaccines
Vasodilators
Vibrio
Vibrio cholerae
Wolinella succinogenes
Yersinia
(prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)

IT Alkaloids, biological studies
Antibodies
Antigens
Enzymes, biological studies
Estrogens
Glycolipids
Glycopeptides
Growth factors, animal
Lipopolysaccharides
Peptides, biological studies
Pheromones, animal
Progestogens
Prostaglandins
Proteins, general, biological studies
Steroids, biological studies
Sulfonamides
Tetracyclines
Vitamins
RL: BPR (Biological process); BSU (Biological study, unclassified); DEV (Device component use); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)

IT Drug delivery systems

(prodrugs; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Proliferation inhibition
(proliferation inhibitors; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Antitumor agents
(prostate gland; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Pilus
(proteins; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Scalp
(psoriasis of; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Drug delivery systems
(rectal; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Artery, disease
(restenosis; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Eye, disease
Eye, disease
Eye, disease
(retina, neovascularization; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Schistosoma
(schistosomiasis from; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Lung, neoplasm
(small-cell carcinoma, inhibitors; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Lung, neoplasm
(small-cell carcinoma; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Muscle relaxants
(spasmolytics; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Contraceptives
(spermicidal; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Brain, disease
(spongiform encephalopathy, agent causing; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Appetite
Appetite
(stimulants; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Brain, disease
(stroke; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Strongylus
(strongylodiasis; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Drug delivery systems
(sustained-release, programmable; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)

IT Osteoporosis
(therapeutic agents; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Bile
(therapy with; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Drug delivery systems
(topical; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Muscle, disease
(torticollis, spasmodic; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Toxocara
(toxocariasis; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Toxoplasma gondii
(toxoplasmosis from; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Drug delivery systems
(transdermal; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Head
(trauma; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Trichinella
(trichinellosis; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Trichomonas
(trichomoniasis; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Drug delivery systems
(vaginal; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Emulsions
(water-in-oil; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT Lactams
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(.beta.-, antibiotics; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT 9002-72-6, Somatotropin
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
(deficiency; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT 9005-49-6, Heparin, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(neutralization of; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT 9001-60-9, Lactate dehydrogenase 37326-33-3, Hyaluronidase
RL: BPR (Biological process); BSU (Biological study, unclassified); DEV (Device component use); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(of sperm; prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)
IT 50-06-6, Phenobarbital, biological studies 50-12-4, Mephenytoin 50-18-0, Cyclophosphamide 50-23-7, Hydrocortisone 50-24-8, Prednisolone 50-28-2, 17.beta.-Estradiol, biological studies 50-33-9, Phenylbutazone, biological studies 50-52-2, Thioridazine 50-55-5, Reserpine 50-78-2, Aspirin 51-55-8, Atropine, biological studies

52-24-4, Thiotepa 52-76-6, Lynestrenol 53-03-2, Prednisone 53-16-7, Estrone, biological studies 53-86-1, Indomethacin 54-11-5, Nicotine 55-48-1, Atropine sulfate 55-63-0, Nitroglycerin 55-86-7, Nitrogen mustard 56-53-1, Diethyl stilbestrol 56-75-7, Chloramphenicol 57-27-2, Morphine, biological studies 57-33-0, Sodium pentobarbital 57-42-1, Meperidine 57-53-4, Meprobamate 57-63-6, Ethinyl estradiol 57-85-2, Testosterone propionate 57-92-1, Streptomycin a, biological studies 58-08-2, Caffeine, biological studies 58-14-0, Pyrimethamine 58-22-0 58-25-3, Chlordiazepoxide 58-39-9, Perphenazine 58-73-1, Diphenhydramine 59-01-8, Kanamycin a 59-05-2, Methotrexate 59-92-7, L-Dopa, biological studies 61-33-6, Penicillin g, biological studies 67-20-9, Nitrofurantoin 68-22-4, Norethisterone 68-23-5, Norethynodrel 69-09-0, Chlorpromazine hydrochloride 69-53-4, Ampicillin 69-72-7D, Salicylic acid, derivs. 71-58-9, Medroxyprogesterone acetate 72-33-3, Mestranol 76-57-3, Codeine 79-57-2, Oxytetracycline 79-64-1, Dimethisterone 91-81-6, Tripelennamine 103-90-2, Acetaminophen 113-15-5, Ergotamine 114-07-8, Erythromycin 114-49-8, Hyoscine hydrobromide 121-54-0 122-09-8, Phentermine 125-29-1, Dihydrocodeinone 125-71-3, Dextromethorphan 127-48-0, Trimethadione 128-62-1, Noscapine 145-94-8, Chlorindanol 148-82-3, Melphalan 155-41-9, Methscopolamine bromide 288-32-4D, Imidazole, derivs. 297-76-7, Ethynodiol diacetate 302-22-7, Chlormadinone acetate 305-03-3, Chlorambucil 309-43-3, Sodium secobarbital 315-30-0, Allopurinol 434-03-7, Ethisterone 439-14-5, Diazepam 443-48-1, Metronidazole 469-62-5 471-34-1, Calcium carbonate, biological studies 497-19-8, Sodium carbonate, biological studies 523-87-5, Dimenhydrinate **546-93-0, Magnesium carbonate** 578-66-5D, 8-Aminoquinoline, derivs. 578-68-7D, 4-Aminoquinoline, derivs. 595-33-5, Megestrol acetate 738-70-5, Trimethoprim 846-50-4, Temazepam 1397-89-3, Amphotericin b 1397-94-0, Antimycin a 1403-66-3, Gentamicin 1404-26-8, Polymyxin b 1404-90-6, Vancomycin 4696-76-8, Kanamycin b 5588-33-0, Mesoridazine 5633-18-1, Melengestrol 5786-21-0, Clozapine 5800-19-1, Metiapine 6533-00-2, Norgestrel 7447-40-7, Potassium chloride (KCl), biological studies 8063-07-8, Kanamycin 9000-83-3, Atpase 9000-92-4, Amylase 9001-62-1, Lipase 9001-63-2, Muramidase 9001-67-6, Neuraminidase 9001-78-9, Alkaline phosphatase 9001-99-4, Ribonuclease 9002-02-2, Succinic acid dehydrogenase 9002-07-7, Trypsin 9004-07-3, Chymotrypsin 9004-10-8, Insulin, biological studies 9025-82-5, Phosphodiesterase 9029-12-3, Glutamic acid dehydrogenase 9035-74-9, Glycogen phosphorylase 9046-27-9, .gamma.-Glutamyltranspeptidase 9079-67-8 10118-90-8, Minocycline 11111-12-9, Cephalosporins 13292-46-1, Rifampin 14271-04-6 21645-51-2, Aluminum hydroxide, biological studies 22232-71-9, Mazindol 24730-10-7, Dihydroergocristine methanesulfonate 25447-66-9 **26780-50-7, Poly(lactide co-glycolide)** 26787-78-0, Amoxicillin 30516-87-1, Azt 32986-56-4, Tobramycin 35189-28-7, Norgestimate 37205-61-1, Proteinase inhibitor 37517-28-5, Amikacin 53678-77-6D, Muramyl dipeptide, derivs. 53994-73-3, Cefaclor 55268-75-2, Cefuroxime 61036-62-2, Teicoplanin 64221-86-9, Imipenem 80738-43-8, Lincosamide 81103-11-9, Clarithromycin 82419-36-1, Ofloxacin 85721-33-1, Ciprofloxacin

RL: BPR (Biological process); BSU (Biological study, unclassified); DEV (Device component use); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)

IT 115966-68-2, Histatin 5 (human parotid saliva) 127716-52-3, Histatin 9 (human parotid saliva) 174270-18-9, 5-25-Histatin 6 (human parotid saliva) 186138-55-6 186138-60-3 194017-97-5 211118-03-5

RL: BPR (Biological process); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)

IT 9002-60-2, Adrenocorticotropin, biological studies 9007-12-9, Calcitonin 9034-40-6, Lhrh 62229-50-9, Epidermal growth factor 123781-17-9, Histatin
RL: BPR (Biological process); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)

IT 9005-64-5, Tween 20 9005-65-6, Tween 80 9005-67-8, Tween 60 106392-12-5, Pluronic
RL: MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)

IT 75-09-2, uses
RL: NUU (Other use, unclassified); USES (Uses)
(prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)

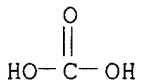
IT 146553-69-7 146553-70-0 146553-71-1 146553-72-2 146553-73-3 146553-74-4 146553-75-5 146553-76-6 146553-77-7 146553-78-8 146553-81-3 146553-82-4 146553-83-5 146553-85-7 146553-86-8 146553-87-9 146553-88-0 146553-89-1 146553-90-4 146553-91-5 146553-92-6 164583-46-4 164583-50-0 164583-51-1 211118-14-8 211118-17-1
RL: PEP (Physical, engineering or chemical process); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)

IT 1406-05-9D, Penicillin, derivs.
RL: BPR (Biological process); BSU (Biological study, unclassified); DEV (Device component use); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Jeyanthi; Proceedings International Symposium on Controlled Release of Bioactive Materials 1996, P351 HCAPLUS
(2) Oppenheim; US 5486503 A 1996 HCAPLUS
(3) Syntex U S AInc; EP 0052510 B2 1994 HCAPLUS
(4) Wang; J of Controlled Release 1991, V17, P23 HCAPLUS
(5) Yan; J of Controlled Release 1994, V32(3), P231 HCAPLUS
(6) Yeh; A Novel Emulsification-Solvent Extraction Technique for Production of Protein Loaded Biodegradable Microparticles for Vaccine and Drug Delivery 1995, V33(3), P437 HCAPLUS

IT **546-93-0, Magnesium carbonate**
26780-50-7, Poly(lactide co-glycolide)
RL: BPR (Biological process); BSU (Biological study, unclassified); DEV (Device component use); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix)

RN 546-93-0 HCAPLUS
CN Carbonic acid, magnesium salt (1:1) (8CI, 9CI) (CA INDEX NAME)

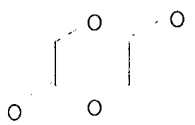


Mg

RN 26780-50-7 HCAPLUS
CN 1,4-Dioxane-2,5-dione, 3,6-dimethyl-, polymer with 1,4-dioxane-2,5-dione (9CI) (CA INDEX NAME)

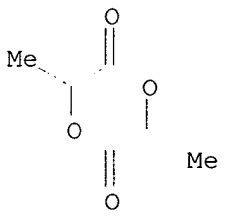
CM 1

CRN 502-97-6
CMF C4 H4 O4



CM 2

CRN 95-96-5
CMF C6 H8 O4



L89 ANSWER 13 OF 19 HCAPLUS COPYRIGHT 2003 ACS
AN **1998:481792** HCAPLUS
DN **129:221097**
TI Stabilization of bovine serum albumin encapsulated in **injectable poly(lactide-co-glycolide)** millicylinders
AU Zhu, G.; Schwendeman, S. P.
CS Division of Pharmaceutics, The Ohio State University, Columbus, OH, 43210, USA
SO Proceedings of the International Symposium on Controlled Release of Bioactive Materials (1998), 25th, 267-268
CODEN: PCRMEY; ISSN: 1022-0178
PB Controlled Release Society, Inc.
DT Journal
LA English
CC 63-5 (Pharmaceuticals)
AB The incomplete protein release from PLGA millicylinders was caused by the formation of water-insol. noncovalent bonded BSA aggregates. The addn. of a base, **Mg(OH)2**, stabilized the protein by

neutralizing the acidic microclimate which was the major source of formation of the aggregates.

ST polylactide polyglycolide millicylinder serum albumin stabilization

IT Polyesters, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(hydroxycarboxylic acid-based; stabilization of serum albumin encapsulated in **injectable poly(lactide-co-glycolide)** millicylinders)

IT Albumins, biological studies
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(serum; stabilization of serum albumin encapsulated in **injectable poly(lactide-co-glycolide)** millicylinders)

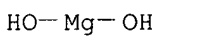
IT Dissolution rate
(stabilization of serum albumin encapsulated in **injectable poly(lactide-co-glycolide)** millicylinders)

IT **1309-42-8, Magnesium hydroxide**
34346-01-5, Glycolic acid-lactic acid copolymer
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(stabilization of serum albumin encapsulated in **injectable poly(lactide-co-glycolide)** millicylinders)

IT **1309-42-8, Magnesium hydroxide**
34346-01-5, Glycolic acid-lactic acid copolymer
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(stabilization of serum albumin encapsulated in **injectable poly(lactide-co-glycolide)** millicylinders)

RN 1309-42-8 HCAPLUS

CN Magnesium hydroxide (Mg(OH)2) (9CI) (CA INDEX NAME)

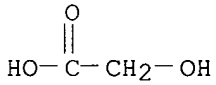


RN 34346-01-5 HCAPLUS

CN Propanoic acid, 2-hydroxy-, polymer with hydroxyacetic acid (9CI) (CA INDEX NAME)

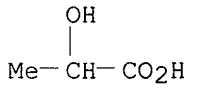
CM 1

CRN 79-14-1
CMF C2 H4 O3



CM 2

CRN 50-21-5
CMF C3 H6 O3

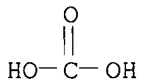


L89 ANSWER 14 OF 19 HCAPLUS COPYRIGHT 2003 ACS
AN **1998:293361** HCAPLUS
DN **128:326543**
TI Oral **vaccines** for young animals with an enteric coating
IN Gerber, Jay Dean
PA Pfizer Inc., USA; Gerber, Jay Dean
SO PCT Int. Appl., 22 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K009-28
ICS A61K039-15; A61K039-175; A61K039-215; A61K039-23
CC 63-6 (Pharmaceuticals)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9818453	A1	19980507	WO 1997-IB1136	19970922
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9741333	A1	19980522	AU 1997-41333	19970922
	ZA 9709592	A	19990428	ZA 1997-9592	19971027
PRAI	US 1996-28802P	P	19961028		
	WO 1997-IB1136	W	19970922		

AB The present invention provides a **vaccine** formulation and method for oral **vaccination** of animals of weaning age or younger against a pathogen in the presence of interfering maternal antibodies. The formulation of the invention comprises an antigen in an enteric coating. An oral **vaccine** was prepd. from lactose, Ac-Di-Sol, Mg stearate, and lyophilized canine parvovirus that had been attenuated.
ST oral **vaccine** enteric coating
IT Canine coronavirus
Canine distemper virus
Canine parvovirus
Canine rotavirus
Gums and Mucilages
(oral **vaccines** for young animals with an enteric coating)
IT Antigens
Gelatins, biological studies
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(oral **vaccines** for young animals with an enteric coating)
IT **Vaccines**
(**oral**; **oral vaccines** for young animals with an enteric coating)
IT Drug delivery systems
(tablets, enteric-coated; oral **vaccines** for young animals with an enteric coating)
IT 57-50-1, Sucrose, biological studies 63-42-3, Lactose 69-65-8, Mannitol 69-79-4, Maltose 471-34-1, Calcium carbonate, biological studies **546-93-0**, **Magnesium carbonate**

557-04-0, Magnesium stearate 1309-48-4, Magnesium oxide, biological studies 7778-18-9, Calcium sulfate 9004-34-6D, Cellulose, derivs., biological studies 9005-25-8, Starch, biological studies 14807-96-6, Talcum, biological studies 25086-15-1, Eudragit S100
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(oral **vaccines** for young animals with an enteric coating)
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) American Home Prod; EP 0181117 A 1986 HCAPLUS
(2) Goodnow, R; US 4152413 A 1979
(3) Ulasov, V; RU 2045960 C 1995 HCAPLUS
(4) Warner Lambert Co; EP 0420459 A 1991 HCAPLUS
IT **546-93-0, Magnesium carbonate**
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(oral **vaccines** for young animals with an enteric coating)
RN 546-93-0 HCAPLUS
CN Carbonic acid, magnesium salt (1:1) (8CI, 9CI) (CA INDEX NAME)



L89 ANSWER 15 OF 19 HCAPLUS COPYRIGHT 2003 ACS
AN 1996:43039 HCAPLUS
DN 124:84901
TI Compositions of transactivating proteins of human immunodeficiency virus
IN Goldstein, Gideon; Culler, Michael D.; Shenbagamurthi, Ponniah
PA Immunobiology Research Institute, Inc., USA
SO PCT Int. Appl., 53 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K039-116
ICS C07K005-00; C07K007-00; C07H019-00; C07H019-22
CC 15-2 (Immunochemistry)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9531999	A1	19951130	WO 1995-US6077	19950516
	W: AM, AU, BB, BG, BR, BY, CA, CN, CZ, EE, FI, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LV, MD, MG, MN, MW, MX, NO, NZ, PL, RO, RU, SD, SG, SI, SK, TJ, TM, TT, UA, UZ, VN				
	RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	CA 2190972	AA	19951130	CA 1995-2190972	19950516
	AU 9526382	A1	19951218	AU 1995-26382	19950516
	EP 767678	A1	19970416	EP 1995-921262	19950516
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
PRAI	US 1994-247991		19940523		
	WO 1995-US6077		19950516		

AB The inventions provides compns. and a novel method of immunization directed against released transactivating (TAT) proteins of certain target viruses that are taken up by other cells, including particularly HIV and

other integrating and chronically infecting viruses. The method employs TAT immunogens, which are capable of eliciting high titer antibody to the native TAT protein, esp. the regions involved in cellular uptake. In example, SIV and HIV-1 TAT peptides and multiple antigenic peptides were synthesized. The multiple antigenic peptides were combined with alum **adjuvant** for immunization in monkeys, and the antibody titers produced in these monkeys were evaluated.

ST TAT protein multiple antigenic peptide; HIV1 SIV **vaccine** TAT multiple antigen

IT Liposome
(**adjuvant**; prepn. of synthetic peptides and multiple antigenic peptide of TAT protein as **vaccine** for HIV-1 and SIV)

IT Alums
RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**adjuvant**; prepn. of synthetic peptides and multiple antigenic peptide of TAT protein as **vaccine** for HIV-1 and SIV)

IT Antigens
RL: PRP (Properties)
(multiple antigenic peptide SIV-TAT80-95; prepn. of synthetic peptides and multiple antigenic peptide of TAT protein as **vaccine** for HIV-1 and SIV)

IT Protein sequences
Vaccines
(prepn. of **synthetic** peptides and multiple antigenic peptide of TAT protein as **vaccine** for HIV-1 and SIV)

IT Gene, animal
RL: PRP (Properties)
(TAT, prepn. of synthetic peptides and multiple antigenic peptide of TAT protein as **vaccine** for HIV-1 and SIV)

IT **Immunostimulants**
(**adjuvants**, prepn. of synthetic peptides and multiple antigenic peptide of TAT protein as **vaccine** for HIV-1 and SIV)

IT Ribonucleic acid formation factors
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(gene tat, prepn. of synthetic peptides and multiple antigenic peptide of TAT protein as **vaccine** for HIV-1 and SIV)

IT Virus, animal
(human immunodeficiency 1, prepn. of synthetic peptides and multiple antigenic peptide of TAT protein as **vaccine** for HIV-1 and SIV)

IT Virus, animal
(simian immunodeficiency, prepn. of synthetic peptides and multiple antigenic peptide of TAT protein as **vaccine** for HIV-1 and SIV)

IT **1309-42-8, Magnesium hydroxide**
RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**adjuvant**; prepn. of synthetic peptides and multiple antigenic peptide of TAT protein as **vaccine** for HIV-1 and SIV)

IT 172593-38-3 172593-39-4
RL: PRP (Properties)
(amino acid sequence; prepn. of synthetic peptides and multiple antigenic peptide of TAT protein as **vaccine** for HIV-1 and SIV)

IT 172548-00-4P 172548-01-5P 172548-02-6P 172548-03-7P 172548-04-8P
172548-05-9P 172548-06-0P 172548-07-1P 172548-08-2P 172548-09-3P
172548-10-6P 172548-11-7P 172548-12-8P 172548-13-9P 172548-14-0P

172548-15-1P 172548-16-2P 172548-17-3P 172548-18-4P 172548-19-5P
172548-20-8P 172548-21-9P 172548-22-0P 172548-23-1P
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of synthetic peptides and multiple antigenic peptide of TAT protein as **vaccine** for HIV-1 and SIV)

IT **1309-42-8, Magnesium hydroxide**
RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**adjuvant**; prepn. of synthetic peptides and multiple antigenic peptide of TAT protein as **vaccine** for HIV-1 and SIV)

RN 1309-42-8 HCAPLUS
CN Magnesium hydroxide (Mg(OH)2) (9CI) (CA INDEX NAME)

HO—Mg—OH

L89 ANSWER 16 OF 19 HCAPLUS COPYRIGHT 2003 ACS
AN **1992:636699** HCAPLUS
DN **117:236699**
TI Preparation of chemically pure and sterile carbon dioxide for subcutaneous **injection**
IN Biro, Istvan; Czipczer, Otto; Demeter, Andras; Piller, Istvan
PA Hung.
SO Hung. Teljes, 17 pp.
CODEN: HUXXBU
DT Patent
LA Hungarian
IC ICM C01B031-20
ICS A61M037-00
CC 49-8 (Industrial Inorganic Chemicals)
Section cross-reference(s): 63
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI HU 58649	A2	19920330	HU 1990-163	19900116
PRAI HU 1990-163		19900116		

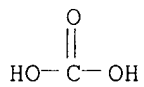
AB Chem. pure and sterile CO2 for s.c. **injection** is prepd. by reacting satd. carbonate or hydrocarbonate solns. with a nontoxic acid in sterilized vessels. The evolving CO2 is stored in reaction vessels or collected in a syringe for immediate **injection**. A convenient alternative consists in mixing anhyd. or crystd. acids and carbonates in a sterilized elastic plastic container sealed with a rubber stopper. CO2 gas is generated by introducing distd. water through the rubber stopper by an **injection** needle connected to a syringe in which the gas is collected for subsequent **injection**. The nontoxic acids are selected from citric, acetic, succinic, tartaric, salicylic, lactic phosphonic, or benzoic acids while the carbonates are chosen from Na2CO3, NaHCO3, K2CO3, KHCO3, Ca(HCO3)2, or Mg(HCO3)2. The vessels and materials are sterilized in autoclave at 120.degree. for 20 min combined with air removal by a vacuum pump. The method is esp. suitable for on-site, lab. and clin. use, and eliminates the storage and handling of pressurized CO2.

ST carbon dioxide sterile pure manuf; **injection** sterile pure carbon dioxide; acid reaction carbonate carbon dioxide

IT **Pharmaceutical dosage forms**
(**injections, s.c.**, carbon dioxide for, manuf. of pure sterile, by reaction of carbonates with nontoxic acids)

IT 124-38-9P, Carbon dioxide, preparation
RL: PREP (Preparation)
(prepn. of pure sterile, by reaction of carbonates with nontoxic acids,

for s.c. **injection**)
IT 50-21-5, **Lactic acid**, reactions 64-19-7, Acetic acid, reactions 65-85-0, Benzoic acid, reactions 69-72-7, reactions 77-92-9, Citric acid, reactions 87-69-4, Tartaric acid, reactions 110-15-6, Succinic acid, reactions 7664-38-2, Phosphoric acid, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with carbonates, pure sterile carbon dioxide prepn. by, for s.c. **injection**)
IT 144-55-8, Sodium bicarbonate, reactions 298-14-6, Potassium bicarbonate 497-19-8, Sodium carbonate, reactions 584-08-7, Potassium carbonate **2090-64-4** 3983-19-5
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with nontoxic acids, pure sterile carbon dioxide prepn. by, for s.c. **injection**)
IT **2090-64-4**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with nontoxic acids, pure sterile carbon dioxide prepn. by, for s.c. **injection**)
RN 2090-64-4 HCAPLUS
CN Carbonic acid, magnesium salt (2:1) (8CI, 9CI) (CA INDEX NAME)



1/2 Mg

L89 ANSWER 17 OF 19 HCAPLUS COPYRIGHT 2003 ACS
AN 1991:30127 HCAPLUS
DN 114:30127
TI Immunoactive compositions containing .gamma.-inulin and an antigen-binding carrier
IN Cooper, Peter Dodd
PA Australian National University, Australia
SO PCT Int. Appl., 28 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K039-39
CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 1, 15
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9001949	A1	19900308	WO 1989-AU349	19890817
	W: AU, JP, US				
	RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
	CA 1337047	A1	19950919	CA 1989-608534	19890816
	AU 8941876	A1	19900323	AU 1989-41876	19890817
	AU 620149	B2	19920213		
	EP 431023	A1	19910612	EP 1989-909684	19890817
	EP 431023	B1	19950405		
	R: BE, CH, DE, FR, GB, IT, LI, NL				
	JP 04501105	T2	19920227	JP 1989-509078	19890817
	JP 3001214	B2	20000124		
	US 5476844	A	19951219	US 1991-656081	19910416
PRAI	AU 1988-9938	A	19880818		
	WO 1989-AU349	A	19890817		

AB An immunotherapeutic compn. comprises inulin (I) or its derivs. in .gamma.-polymorphic form, an antigen-binding material, and optionally an immune modulator, such as an antigen or a cytokine. The antigen-binding material is a substance of low soly. capable of binding proteins, lipid, carbohydrates, and antigenic substances and selected from metal-contg. ppts., such as Al(OH)3 gels. The compn. is useful for the treatment of allergic disorders, immune deficiency, rheumatic diseases, and other disorders related to a dysfunction of the immune systems. A soln. contg. I was slurried with 1% by vol. of Al(OH)3 gel to give a I concn. >5.0% (wt./vol.) and the suspension was cooled to 5.degree. and recrystd. for several days and kept at 37.degree. for several days to transform to the .gamma.-configuration, then centrifuged, resuspended in water, heated for 1 h at 50-52.degree., and washed to 0 supernatant refractive index. The obtained compn. was mixed with saline contg. keyhole limpet hemocyanin and **injected** into mice; the antibody response was increased several-fold over that produced in mice **injected** in parallel with the same antigen adsorbed on Al(OH)3 gel or admixed with .gamma.-I, or adsorbed to Al(OH)3 gel and mixed with .gamma.-I. Also, the compn. carrying on adsorbed keyhole limpet hemocyanin given to mice showed specific serum antibody titers greater than those from Freund's incomplete **adjuvant** and comparable to those from Freund's complete **adjuvant.**

ST inulin alum antigen carrier immune stimulant

IT Complement
RL: BIOL (Biological study)
(alternative pathway of, activation of, immunotherapeutic compns. contg. .gamma.-inulin and antigen-binding carrier for)

IT Immunoglobulins
RL: BIOL (Biological study)
(anti-idiotype, immunotherapeutic compns. contg. .gamma.-inulin and antigen-binding carrier and)

IT Immunomodulators
Immunostimulants
Microorganism
Antigens
Interferons
Lymphokines and Cytokines
RL: BIOL (Biological study)
(immunotherapeutic compns. contg. .gamma.-inulin and antigen-binding carrier and)

IT Immunodeficiency
Rheumatism
(treatment of, immunotherapeutic compns. contg. .gamma.-inulin and antigen-binding carrier for)

IT **Vaccines**
(.gamma.-inulin and antigen-binding material and antigen combinations for)

IT Allergy inhibitors
Anthelmintics
Neoplasm inhibitors
Parasiticides
Protozoacides
(.gamma.-inulin and antigen-binding material combinations)

IT **Immunostimulants**
(**adjuvants,** .gamma.-inulin and antigen-binding material combinations)

IT Digestive tract
Nervous system
(disease, treatment of, immunotherapeutic compns. contg. .gamma.-inulin and antigen-binding carrier for)

IT Toxins
RL: BIOL (Biological study)
(endo-, immunotherapeutic compns. contg. .gamma.-inulin and

antigen-binding carrier and)
IT Lymphokines and Cytokines
RL: BIOL (Biological study)
(interleukin 2, immunotherapeutic compns. contg. .gamma.-inulin and antigen-binding carrier and)
IT Lymphokines and Cytokines
RL: BIOL (Biological study)
(interleukins, immunotherapeutic compns. contg. .gamma.-inulin and antigen-binding carrier and)
IT Bactericides, Disinfectants, and Antiseptics
Fungicides and Fungistats
Virucides and Virustats
(medical, .gamma.-inulin and antigen-binding material combinations)
IT Glycopeptides
RL: BIOL (Biological study)
(muramic acid-contg., immunotherapeutic compns. contg. .gamma.-inulin and antigen-binding carrier and)
IT **Pharmaceutical dosage forms**
(nasal, .gamma.-inulin and antigen-binding carriers in, for immune response potentiation)
IT **Pharmaceutical dosage forms**
(ophthalmic, .gamma.-inulin and antigen-binding carriers in, for immune response potentiation)
IT **Pharmaceutical dosage forms**
(oral, .gamma.-inulin and antigen-binding carriers in, for immune response potentiation)
IT Polysaccharides, esters
RL: BIOL (Biological study)
(phosphates, as antigen-binding carriers, immunostimulants contg. .gamma.-inulin and)
IT **Pharmaceutical dosage forms**
(rectal, .gamma.-inulin and antigen-binding carriers in, for immune response potentiation)
IT Polysaccharides, esters
RL: BIOL (Biological study)
(sulfates, as antigen-binding carriers, immunostimulants contg. .gamma.-inulin and)
IT **Pharmaceutical dosage forms**
(topical, .gamma.-inulin and antigen-binding carriers in, for immune response potentiation)
IT Lymphokines and Cytokines
RL: BIOL (Biological study)
(tumor necrosis factor, immunotherapeutic compns. contg. .gamma.-inulin and antigen-binding carrier and)
IT **Pharmaceutical dosage forms**
(vaginal, .gamma.-inulin and antigen-binding carriers in, for immune response potentiation)
IT 1305-62-0D, Calcium hydroxide, derivs. **1309-42-8D, Magnesium hydroxide**, derivs. 1398-61-4, Chitin 7487-88-9D, Magnesium sulfate, derivs. 7778-18-9D, Calcium sulfate, derivs. 7784-30-7D, Aluminum phosphate, derivs. 9004-34-6D, Cellulose, derivs. 9004-54-0, Dextran, biological studies 9005-49-6, Heparin, biological studies 9012-76-4, Deacetylchitin 10043-01-3D, Aluminum sulfate, derivs. 10043-83-1D, Magnesium phosphate, derivs. 10103-46-5D, Calcium phosphate, derivs. 21645-51-2D, Aluminum hydroxide, derivs.
RL: BIOL (Biological study)
(as antigen-binding carriers, immunostimulants contg. .gamma.-inulin and)
IT 111069-91-1, Thymus-stimulating hormone
RL: BIOL (Biological study)
(immunotherapeutic compns. contg. .gamma.-inulin and antigen-binding carrier and)

IT 9005-80-5, Inulin 9005-80-5D, Inulin, esters and ethers 25702-76-5
RL: BIOL (Biological study)
(.gamma.-form of, immunostimulants contg. antigen-binding carrier and)
IT **1309-42-8D, Magnesium hydroxide**, derivs.
RL: BIOL (Biological study)
(as antigen-binding carriers, immunostimulants contg. .gamma.-inulin and)
RN 1309-42-8 HCAPLUS
CN Magnesium hydroxide (Mg(OH)2) (9CI) (CA INDEX NAME)

HO--Mg--OH

L89 ANSWER 18 OF 19 HCAPLUS COPYRIGHT 2003 ACS
AN 1990:558659 HCAPLUS
DN 113:158659
TI Modification of aluminum hydroxide used as an **adjuvant**
AU Stas, N. F.; Konovalova, Z. S.; Marchenko, N. A.
CS Tomsk. Politkeh. Inst., Tomsk, USSR
SO Khimiko-Farmatsevticheskii Zhurnal (1990), 24(7), 65-6
CODEN: KHFZAN; ISSN: 0023-1134
DT Journal
LA Russian
CC 63-8 (Pharmaceuticals)
AB Al(OH)3, a **vaccine adjuvant**, modified by **Mg(OH)2** showed enhanced activity (coeff. of sorption activity 710-720 mg Congo red/1 g Al2O3). This effect may be useful in the prodn. of **vaccines** to reduce the dose of the **adjuvant**.
ST aluminum hydroxide **vaccine adjuvant** modification; **magnesium hydroxide vaccine adjuvant** modification
IT **Vaccines**
(**adjuvant**, aluminum hydroxide modified by **magnesium hydroxide** as, sorption of)
IT Adsorption
(by aluminum hydroxide modified by **magnesium hydroxide**, **vaccines** prepn. in relation to)
IT **1309-42-8, Magnesium hydroxide**
RL: BIOL (Biological study)
(aluminum hydroxide as **vaccine adjuvant** modification by, sorption in relation to)
IT 1310-73-2, Sodium hydroxide, biological studies 1336-21-6, Ammonium hydroxide
RL: BIOL (Biological study)
(in aluminum hydroxide modification by **magnesium hydroxide**, sorption in relation to)
IT 7487-88-9, Magnesium sulfate, biological studies 7786-30-3, Magnesium chloride, biological studies 10377-60-3, Magnesium nitrate
RL: BIOL (Biological study)
(**magnesium hydroxide** prepn. from, for aluminum hydroxide modification, sorption in relation to)
IT 21645-51-2, Aluminum hydroxide, biological studies
RL: BIOL (Biological study)
(**vaccine adjuvant**, modification by **magnesium hydroxide** of, sorption in relation to)
IT **1309-42-8, Magnesium hydroxide**
RL: BIOL (Biological study)
(aluminum hydroxide as **vaccine adjuvant** modification by, sorption in relation to)
RN 1309-42-8 HCAPLUS

CN Magnesium hydroxide (Mg(OH)2) (9CI) (CA INDEX NAME)

HO—Mg—OH

L89 ANSWER 19 OF 19 HCAPLUS COPYRIGHT 2003 ACS
AN **1982:550758** HCAPLUS
DN **97:150758**
TI **Injectable** fat-protein emulsions and their use in therapy
IN Glas, Bernard; Bacques, Claude Paul
PA Etablissements Gattefosse, Fr.
SO Fr. Demande, 9 pp.
CODEN: FRXXBL
DT Patent
LA French
IC A61K037-02
CC 63-6 (Pharmaceuticals)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	FR 2497668	A1	19820716	FR 1981-635	19810115
	FR 2497668	B1	19860321		
PRAI	FR 1981-635		19810115		

AB Stable emulsions of fats and proteins for i.v. **injection** in treatment of nutritional disorders without affecting blood consts. contained proteins 55-65, NaHCO3 .apprx.2.26, triglycerides 6-40, and KCl 0.4 g/L. The fats may be medium-chain triglycerides. An aq. emulsion which when subjected to autoclaving at 115.degree. for 20 min did not have appreciable fat hydrolysis was prepd. from acid casein 60, NaHCO3 2, KCl 1.8, **Mg(OH)2** 0.3, fats 6, and soybean lecithins 1 g/L, with the further addn. of sugars, vitamins, and trace elements.
ST casein glyceride emulsion **parenteral**
IT Caseins, biological studies
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(glyceride emulsions with, for **parenteral** nutrition)
IT Glycerides, compounds
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(C8-10-ethoxylated, casein-glyceride emulsions contg., for **parenteral** nutrition, Labrafac Hydro WL 1219)
IT Glycerides, biological studies
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(medium-chain, casein emulsions with, for **parenteral** nutrition)
IT **Pharmaceuticals**
(**parenterals**, nutrient, casein-glyceride emulsions for)
IT 144-55-8, biological studies 7447-40-7, biological studies
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(casein-glyceride emulsions contg., for **parenteral** nutrition)

=> sel hit rn
E10 THROUGH E18 ASSIGNED

=> fil reg
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STRUCTURE FILE UPDATES: 23 APR 2003 HIGHEST RN 504385-01-7
DICTIONARY FILE UPDATES: 23 APR 2003 HIGHEST RN 504385-01-7

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

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Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

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               (1309-42-8/RN)
             1 26780-50-7/BI
               (26780-50-7/RN)
             1 34346-01-5/BI
               (34346-01-5/RN)
             1 13463-67-7/BI
               (13463-67-7/RN)
             1 141256-04-4/BI
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             1 172889-84-8/BI
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             1 2090-64-4/BI
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             1 66594-14-7/BI
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               OR 13463-67-7/BI OR 141256-04-4/BI OR 172889-84-8/BI OR 2090-64-
               4/BI OR 66594-14-7/BI)

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L90  ANSWER 1 OF 9  REGISTRY  COPYRIGHT 2003 ACS
RN   172889-84-8  REGISTRY
CN   Sorbitan, tri-(9Z)-9-octadecenoate, mixt. with
     2,6,10,15,19,23-hexamethyl-2,6,10,14,18,22-tetr
     mono-(9Z)-9-octadecenoate poly(oxy-1,2-ethanedi
     INDEX NAME)
OTHER CA INDEX NAMES:
CN   2,6,10,14,18,22-Tetracosahexaene, 2,6,10,15,19,
     (2E,6E,10E,14E,18E,22E)-, mixt. contg. (9CI)
CN   2,6,10,14,18,22-Tetracosahexaene, 2,6,10,15,19,23-hexamethyl-, (all-E)-,
     mixt. contg.
CN   Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs.,
     mixt. contg. (9CI)
CN   Sorbitan, mono-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs., (Z)-,
     mixt. contg.
CN   Sorbitan, tri-9-octadecenoate, (Z,Z,Z)-, mixt. with (all-E)-
     2,6,10,15,19,23-hexamethyl-2,6,10,14,18,22-tetracosahexaene and
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Hit compounds for references 1-19

(Z)-sorbitan mono-9-octadecenoate poly(oxy-1,2-ethanediyl) derivs.
OTHER NAMES:
CN MF 59
CN MF 69
FS STEREOSEARCH
DR 172964-79-3
MF C60 H110 O9 . C30 H50 . Unspecified
CI MXS
SR CA
LC STN Files: BIOSIS, CA, CAPLUS, IPA, PHAR, TOXCENTER, USPAT2, USPATFULL

CM 1

CRN 9005-65-6
CMF Unspecified
CCI PMS, MAN

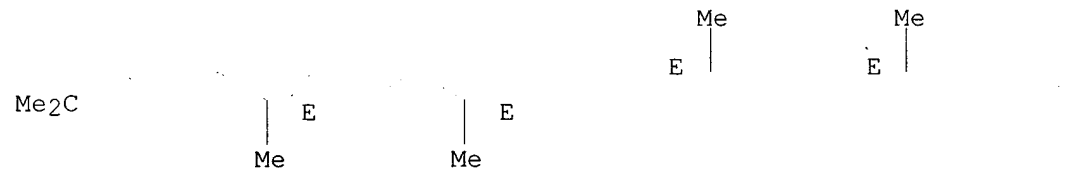
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 111-02-4
CMF C30 H50

Double bond geometry as shown.

PAGE 1-A



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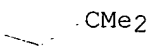

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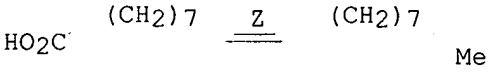
CRN 1333-71-7
CMF C60 H110 O9
CCI IDS

CM 4

CRN 112-80-1
CMF C18 H34 O2

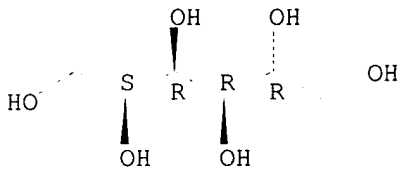
Double bond geometry as shown.



CM 5

CRN 50-70-4
CMF C6 H14 O6

Absolute stereochemistry.



49 REFERENCES IN FILE CA (1962 TO DATE)
49 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 138:88637

REFERENCE 2: 137:368575

REFERENCE 3: 137:315844

REFERENCE 4: 137:293522

REFERENCE 5: 137:246527

REFERENCE 6: 137:123752

REFERENCE 7: 137:62160

REFERENCE 8: 137:32060

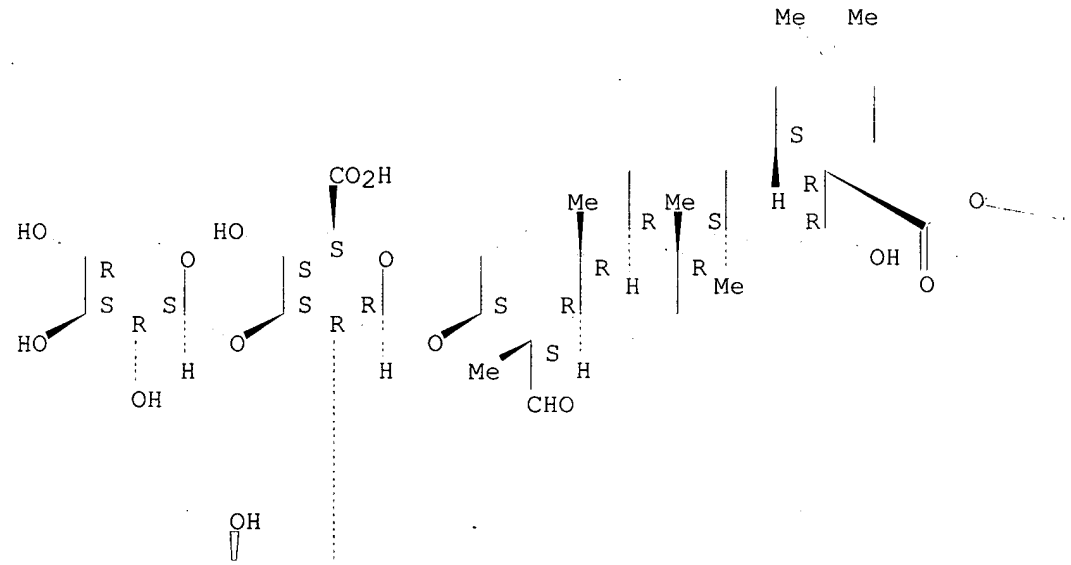
REFERENCE 9: 136:293507

REFERENCE 10: 136:261424

L90 ANSWER 2 OF 9 REGISTRY COPYRIGHT 2003 ACS
RN **141256-04-4** REGISTRY
CN .beta.-D-Glucopyranosiduronic acid, (3.beta.,4.alpha.,16.alpha.)-28-[[O-D-apio-.beta.-D-furanosyl-(1.fwdarw.3)-O-.beta.-D-xylopyranosyl-(1.fwdarw.4)-O-6-deoxy-.alpha.-L-mannopyranosyl-(1.fwdarw.2)-4-O-[5-[[5-(.alpha.-L-arabinofuranosyloxy)-3-hydroxy-6-methyl-1-oxooctyl]oxy]-3-hydroxy-6-methyl-1-oxooctyl]-6-deoxy-.beta.-D-galactopyranosyl]oxy]-16-hydroxy-23,28-dioxoolean-12-en-3-yl O-.beta.-D-galactopyranosyl-(1.fwdarw.2)-O-[.beta.-D-xylopyranosyl-(1.fwdarw.3)]- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Oleanane, .beta.-D-glucopyranosiduronic acid deriv.
OTHER NAMES:
CN QA 21
CN QA 21V1
CN QS 21
CN Saponin QA 21V1
CN Stimulon
FS STEREOSEARCH
DR 170966-64-0, 154335-26-9
MF C92 H148 O46
CI COM
SR CA
LC STN Files: AGRICOLA, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CIN, DRUGNL, DRUGUPDATES, EMBASE, IPA, MEDLINE, PHAR, PROMT, TOXCENTER, USPAT2, USPATFULL

Absolute stereochemistry.

PAGE 1-A



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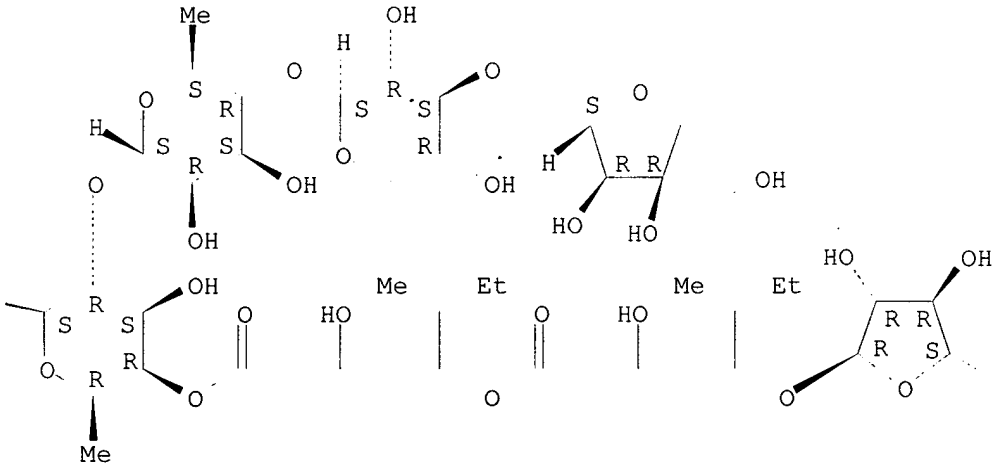

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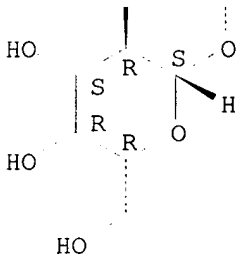
OH

PAGE 2-A



257 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
257 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 138:203660

REFERENCE 2: 138:185688

REFERENCE 3: 138:168809

REFERENCE 4: 138:121267

REFERENCE 5: 138:88646

REFERENCE 6: 138:88250

REFERENCE 7: 138:54096

REFERENCE 8: 138:37692

REFERENCE 9: 138:23654

REFERENCE 10: 138:23639

L90 ANSWER 3 OF 9 REGISTRY COPYRIGHT 2003 ACS
RN **66594-14-7** REGISTRY
CN Quil-A (9CI) (CA INDEX NAME)
OTHER NAMES:
CN Iscotec AB
CN Spikoside
ENTE A glycoside from Quillaja saponaria bark

MF Unspecified
CI COM, MAN
LC STN Files: ADISNEWS, AGRICOLA, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CEN, CHEMLIST, CIN, EMBASE, IPA, MEDLINE, PROMT, RTECS*, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
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12 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
182 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 138:203652

REFERENCE 2: 138:186392

REFERENCE 3: 138:121267

REFERENCE 4: 138:112101

REFERENCE 5: 138:105623

REFERENCE 6: 138:54092

REFERENCE 7: 138:37663

REFERENCE 8: 137:368575

REFERENCE 9: 137:336553

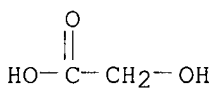
REFERENCE 10: 137:316036

L90 ANSWER 4 OF 9 REGISTRY COPYRIGHT 2003 ACS
RN **34346-01-5** REGISTRY
CN Propanoic acid, 2-hydroxy-, polymer with hydroxyacetic acid (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Acetic acid, hydroxy-, polymer with 2-hydroxypropanoic acid (9CI)
OTHER NAMES:
CN (.+-.)-2-Hydroxypropanoic acid-hydroxyacetic acid copolymer
CN Alzamer Depot
CN dl-Lactic acid-glycolic acid copolymer
CN DL-Lactic acid-glycolic acid copolymer
CN dl-Lactic acid-glycolic acid polymer
CN Glycolic acid-DL-lactic acid copolymer
CN Glycolic acid-lactic acid copolymer
CN Glycolic acid-lactic acid polymer
CN Hydroxyacetic acid-(.+-.)-2-hydroxypropanoic acid copolymer
CN Hydroxyacetic acid-2-hydroxypropionic acid copolymer
CN Hydroxyacetic acid-lactic acid copolymer
CN Lactic acid-glycolic acid copolymer
CN Lactic acid-glycolic acid polymer
CN PLGA 5010
CN PLGA 5020
CN Poly(DL-lactic acid-glycolic acid)
CN Poly(glycolic acid-co-DL-lactic acid)
CN Poly(glycolic acid-lactic acid)
CN Poly(lactic acid-glycolic acid)
CN Resolut
CN Resolut LT
CN Resolut ST
CN Resomer RG 502
CN Resomer RG 502H

CN Resomer RG 504H
CN Resomer RG 858
CN RG 502H
DR 59199-59-6, 66327-52-4, 153439-97-5, 265647-91-4
MF (C3 H6 O3 . C2 H4 O3)x
CI PMS, COM
PCT Polyester, Polyester formed
LC STN Files: AGRICOLA, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CEN, CHEMCATS, CIN, CSCHEM, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, TOXCENTER, USPAT2, USPATFULL

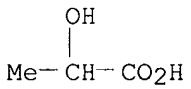
CM 1

CRN 79-14-1
CMF C2 H4 O3



CM 2

CRN 50-21-5
CMF C3 H6 O3



1360 REFERENCES IN FILE CA (1962 TO DATE)
30 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1367 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 138:260179

REFERENCE 2: 138:256185

REFERENCE 3: 138:243317

REFERENCE 4: 138:243315

REFERENCE 5: 138:243254

REFERENCE 6: 138:243210

REFERENCE 7: 138:243078

REFERENCE 8: 138:243072

REFERENCE 9: 138:242962

REFERENCE 10: 138:226719

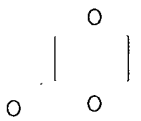
L90 ANSWER 5 OF 9 REGISTRY COPYRIGHT 2003 ACS
RN **26780-50-7** REGISTRY
CN 1,4-Dioxane-2,5-dione, 3,6-dimethyl-, polymer with 1,4-dioxane-2,5-dione (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:

CN 1,4-Dioxane-2,5-dione, polymer with 3,6-dimethyl-1,4-dioxane-2,5-dione (9CI)
CN p-Dioxane-2,5-dione, 3,6-dimethyl-, polyester with p-dioxane-2,5-dione (8CI)
CN p-Dioxane-2,5-dione, polyester with 3,6-dimethyl-p-dioxane-2,5-dione (8CI)
OTHER NAMES:
CN 1,4-Dioxane-2,5-dione-1-DL-3,6-dimethyl-1,4-dioxane-2,5-dione copolymer
CN 3,6-Dimethyl-1,4-dioxane-2,5-dione-1,4-dioxane-2,5-dione copolymer
CN Atrigel
CN Diglycolide-DL-dilactide copolymer
CN DL-Lactide-glycolide copolymer
CN Ethicon W 9045
CN Glycolide-dl-lactide copolymer
CN Glycolide-DL-lactide copolymer
CN Glycolide-DL-lactide polymer
CN Glycolide-lactide copolymer
CN Glycolide-lactide polymer
CN Lactide-diglycolide copolymer
CN Lactide-glycolide copolymer
CN Medisorb
CN Medisorb (polymer)
CN Medisorb 5050DL
CN Medisorb 8515DL
CN PLG
CN Poly(dl-lactide-co-glycolide)
CN Poly(DL-lactide-glycolide)
CN Poly(glycolide-co-lactide)
CN Poly(glycolide-lactide)
CN Poly(lactide-co-glycolide)
CN Poly-(DL)-lactide-co-glycolide
CN Polyglactin
CN Polyglactin 370
CN Polyglactin 910
CN Resomer R 6-503
CN Resomer RG 206
CN Resomer RG 501H
CN Resomer RG 503
CN Resomer RG 503H
CN Resomer RG 504
CN Resomer RG 505
CN Resomer RG 506
CN Resomer RG 752
CN Resomer RG 752H
CN Resomer RG 755
CN Resomer RG 756
CN RG 501H
CN RG 503
CN RG 503H
CN RG 504
CN RG 755
CN Vicryl
CN Vicryl 910
CN Vicryl PM
ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for DISPLAY
DR 130953-65-0, 119652-89-0, 31213-75-9, 107760-14-5, 444725-05-7, 460731-87-7
MF (C6 H8 O4 . C4 H4 O4)x
CI PMS, COM
PCT Polyester, Polyester formed
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CAPLUS, CEN, CHEMCATS, CIN, CSCHEM, DDFU, DIOGENES, DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, NIOSHTIC, PIRA, PROMT, TOXCENTER, USAN,

USPAT2, USPATFULL

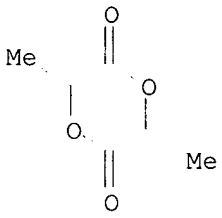
CM 1

CRN 502-97-6
CMF C4 H4 O4



CM 2

CRN 95-96-5
CMF C6 H8 O4



2097 REFERENCES IN FILE CA (1962 TO DATE)
38 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
2112 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 138:260484

REFERENCE 2: 138:260470

REFERENCE 3: 138:260458

REFERENCE 4: 138:260411

REFERENCE 5: 138:260341

REFERENCE 6: 138:260340

REFERENCE 7: 138:260263

REFERENCE 8: 138:260247

REFERENCE 9: 138:260229

REFERENCE 10: 138:255738

L90 ANSWER 6 OF 9 REGISTRY COPYRIGHT 2003 ACS
RN **13463-67-7** REGISTRY
CN Titanium oxide (TiO2) (8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN 1385RN59
CN 1500D
CN 234DA
CN 500HD

CN 63B1 White
CN A 100
CN A 160
CN A 200
CN A 200 (pigment)
CN A 330
CN A 330 (pigment)
CN A-Fil Cream
CN A-FN 3
CN Aerolyst 7710
CN Aerosil P 25
CN Aerosil P 25S6
CN Aerosil P 27
CN AF-E 3D
CN AK 15
CN AK 15 (pigment)
CN AM 100
CN Amperit 780.0
CN AMT 100
CN AMT 600
CN AUF 0015S
CN Austiox R-CR 3
CN B 101
CN B 101 (pigment)
CN Bayer R-FD 1
CN Bayertitan A
CN Bayertitan AN 3
CN Bayertitan R-FD 1
CN Bayertitan R-FK 21
CN Bayertitan R-FK-D
CN Bayertitan R-KB 2
CN Bayertitan R-KB 3
CN Bayertitan R-KB 4
CN Bayertitan R-KB 5
CN Bayertitan R-KB 6
CN Bayertitan R-U 2
CN Bayertitan R-U-F
CN Bayertitan R-V-SE 20
CN Bayertitan T
CN Bistrater L-NSC 200C
CN BR 29-7-2
CN C 97
CN C 97 (oxide)
CN C.I. 77891
CN C.I. Pigment White 6
CN Cab-O-Ti
ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for DISPLAY
AR 51745-87-0
DR 494848-07-6, 494848-23-6, 494851-77-3, 494851-98-8, 12000-59-8, 12701-76-7, 12767-65-6, 12789-63-8, 1309-63-3, 1344-29-2, 55068-84-3, 55068-85-4, 62338-64-1, 101239-53-6, 98084-96-9, 37230-92-5, 37230-94-7, 37230-95-8, 37230-96-9, 39320-58-6, 39360-64-0, 39379-02-7, 100292-32-8, 116788-85-3, 185323-71-1, 185828-91-5, 188357-76-8, 188357-79-1, 195740-11-5, 221548-98-7, 224963-00-2, 246178-32-5, 252962-41-7
MF O2 Ti
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DIOGENES, DIPPR*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NIOSHTIC, PDLCOM*, PIRA, PROMT, RTECS*, TOXCENTER, TULSA,

ULIDAT, USAN, USPAT2, USPATFULL, VTB
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)

O=Ti=O

111072 REFERENCES IN FILE CA (1962 TO DATE)
1528 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
111320 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 138:264907

REFERENCE 2: 138:264881

REFERENCE 3: 138:264879

REFERENCE 4: 138:264871

REFERENCE 5: 138:264804

REFERENCE 6: 138:264605

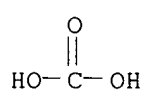
REFERENCE 7: 138:264348

REFERENCE 8: 138:264336

REFERENCE 9: 138:264257

REFERENCE 10: 138:264217

L90 ANSWER 7 OF 9 REGISTRY COPYRIGHT 2003 ACS
RN **2090-64-4** REGISTRY
CN Carbonic acid, magnesium salt (2:1) (8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN Magnesium bicarbonate
CN Magnesium bicarbonate (Mg(HCO3)2)
CN Magnesium hydrogen carbonate
MF C H2 O3 . 1/2 Mg
CI COM
LC STN Files: AGRICOLA, BIOBUSINESS, BIOSIS, CA, CAOLD, CAPLUS, CHEMLIST, CIN, DETHERM*, EMBASE, GMELIN*, IFICDB, IFIPAT, IFIUDB, PDLCOM*, PROMT, TOXCENTER, TULSA, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)
CRN (463-79-6)



1/2 Mg

393 REFERENCES IN FILE CA (1962 TO DATE)
2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
393 REFERENCES IN FILE CAPLUS (1962 TO DATE)

1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:240043

REFERENCE 2: 138:124777

REFERENCE 3: 138:124248

REFERENCE 4: 138:105958

REFERENCE 5: 138:92564

REFERENCE 6: 138:52363

REFERENCE 7: 137:252664

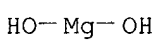
REFERENCE 8: 137:237456

REFERENCE 9: 137:204193

REFERENCE 10: 137:172175

L90 ANSWER 8 OF 9 REGISTRY COPYRIGHT 2003 ACS
RN **1309-42-8** REGISTRY
CN Magnesium hydroxide (Mg(OH)2) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 10A
CN 10A (hydroxide)
CN 200-06H
CN Alcanex NHC 25
CN Asahi Glass 200-06
CN Combustrol 500
CN Daimushew 6000
CN DP 393
CN DSB 100
CN Duhor
CN Duhor N
CN Ebson RF
CN Finemag MO-T
CN Finemag SN-L
CN FloMag H
CN FloMag HUS
CN FR 20
CN FR 20-310
CN Hydrofy G 1.5
CN Hydrofy G 2.5
CN Hydrofy N
CN Ki 22-5B
CN Kisma KX 4SU
CN Kisuma
CN Kisuma 120
CN Kisuma 2
CN Kisuma 3A
CN Kisuma 4AF
CN Kisuma 5
CN Kisuma 54A
CN Kisuma 5A
CN Kisuma 5A-N
CN Kisuma 5AU
CN Kisuma 5B
CN Kisuma 5B-N
CN Kisuma 5BG
CN Kisuma 5E

CN Kisuma 5EU
CN Kisuma 5J
CN Kisuma 5P
CN Kisuma 6E
CN Kisuma 7B
CN Kisuma KX 4SU
CN Kisuma S 4
CN KX 4S
CN KX 80
CN KX 8S(A)
CN KX 8S(B)
CN Kyowamag F
CN Lederscon
ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for DISPLAY
DR 12195-86-7, 13760-51-5
MF H2 Mg O2
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DIOGENES, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NIOSHTIC, PDLCOM*, PIRA, PROMT, RTECS*, TOXCENTER, TULSA, USAN, USPAT2, USPATFULL, VETU, VTB
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)



11581 REFERENCES IN FILE CA (1962 TO DATE)
156 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
11603 REFERENCES IN FILE CAPLUS (1962 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:264859

REFERENCE 2: 138:260473

REFERENCE 3: 138:260445

REFERENCE 4: 138:260109

REFERENCE 5: 138:260101

REFERENCE 6: 138:260021

REFERENCE 7: 138:259449

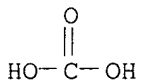
REFERENCE 8: 138:259044

REFERENCE 9: 138:256332

REFERENCE 10: 138:256210

L90 ANSWER 9 OF 9 REGISTRY COPYRIGHT 2003 ACS
RN **546-93-0** REGISTRY
CN Carbonic acid, magnesium salt (1:1) (8CI, 9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Magnesium carbonate (6CI, 7CI)
OTHER NAMES:

CN Apolda
CN C.I. 77713
CN Carbonate magnesium
CN DCI Light Magnesium Carbonate
CN Destab
CN Gold Star
CN Gold Star (carbonate)
CN GP 20
CN GP 20 (carbonate)
CN GP 30
CN GP 30 (carbonate)
CN Kimboshi
CN MA 70 (carbonate)
CN Magfy
CN Magnesium carbonate (1:1)
CN Magnesium carbonate (MgCO3)
CN Stan-Mag Magnesium Carbonate
AR 7757-69-9
DR 1784-39-0, 183480-27-5, 364320-47-8
MF C H2 O3 . Mg
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, DDFU, DETHERM*, DIOGENES, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM*, PIRA, PROMT, RTECS*, TOXCENTER, TULSA, USAN, USPAT2, USPATFULL, VETU, VTB
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)
CRN (463-79-6)



Mg

6851 REFERENCES IN FILE CA (1962 TO DATE)
114 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
6863 REFERENCES IN FILE CAPLUS (1962 TO DATE)
19 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:262677

REFERENCE 2: 138:259171

REFERENCE 3: 138:259044

REFERENCE 4: 138:243990

REFERENCE 5: 138:243332

REFERENCE 6: 138:242911

REFERENCE 7: 138:241717

REFERENCE 8: 138:240362

REFERENCE 9: 138:240046

REFERENCE 10: 138:240045

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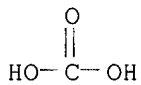
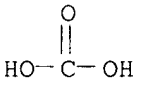
L8 ANSWER 1 OF 8 REGISTRY COPYRIGHT 2003 ACS
RN 76110-00-4 REGISTRY
CN Carbonic acid, magnesium salt (9:5), monohydrate (9CI) (CA INDEX NAME)
MF **C H2 O3 . 1/9 H2 O . 5/9 Mg**
LC STN Files: GMELIN*
(*File contains numerically searchable property data)
CRN (463-79-6)



5/9 Mg

1/9 H_2O

L8 ANSWER 2 OF 8 REGISTRY COPYRIGHT 2003 ACS
RN 68973-26-2 REGISTRY
CN Carbonic acid, magnesium salt (1:1), dihydrate (9CI) (CA INDEX NAME)
OTHER NAMES:
CN Magnesium carbonate (MgCO3) dihydrate
MF **C H2 O3 . 2 H2 O . Mg**
LC STN Files: CA, CAPLUS, GMELIN*
(*File contains numerically searchable property data)
CRN (463-79-6)



Mg

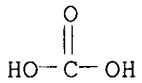
2 H_2O

1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 90:62102

L8 ANSWER 3 OF 8 REGISTRY COPYRIGHT 2003 ACS

RN 61042-72-6 REGISTRY
CN Carbonic acid, magnesium salt (1:1), pentahydrate (9CI) (CA INDEX NAME)
OTHER NAMES:
CN Magnesium carbonate (MgCO3) pentahydrate
CN Magnesium carbonate pentahydrate
MF **C H2 O3 . 5 H2 O . Mg**
LC STN Files: AGRICOLA, BIOSIS, CA, CAPLUS, GMELIN*, TOXCENTER
(*File contains numerically searchable property data)
CRN (463-79-6)



Mg

5 H_2O

14 REFERENCES IN FILE CA (1962 TO DATE)
14 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 136:219810

REFERENCE 2: 135:51120

REFERENCE 3: 129:179332

REFERENCE 4: 129:56582

REFERENCE 5: 123:235681

REFERENCE 6: 115:20830

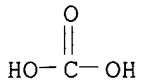
REFERENCE 7: 112:237644

REFERENCE 8: 111:181933

REFERENCE 9: 104:228808

REFERENCE 10: 104:71115

L8 ANSWER 4 OF 8 REGISTRY COPYRIGHT 2003 ACS
RN 33660-53-6 REGISTRY
CN Carbonic acid, magnesium salt (1:1), tetrahydrate (8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN Magnesium carbonate (MgCO3) tetrahydrate
MF **C H2 O3 . 4 H2 O . Mg**
LC STN Files: CA, CAPLUS, GMELIN*
(*File contains numerically searchable property data)
CRN (463-79-6)



Mg

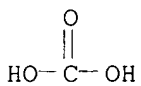
4 H_2O

2 REFERENCES IN FILE CA (1962 TO DATE)
2 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 90:62102

REFERENCE 2: 75:53782

L8 ANSWER 5 OF 8 REGISTRY COPYRIGHT 2003 ACS
RN 23389-33-5 REGISTRY
CN Carbonic acid, magnesium salt (1:1), hydrate (8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN Magnesium carbonate hydrate
MF **C H2 O3 . x H2 O . Mg**
LC STN Files: CA, CAPLUS, CHEMCATS, CSCHEM, GMELIN*, IFICDB, IFIPAT, IFIUDB, MSDS-OHS, TOXCENTER, USAN, USPATFULL
(*File contains numerically searchable property data)
CRN (463-79-6)



Mg

x H_2O

18 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
18 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 134:313174

REFERENCE 2: 129:217390

REFERENCE 3: 128:103226

REFERENCE 4: 124:119612

REFERENCE 5: 123:148293

REFERENCE 6: 123:12338

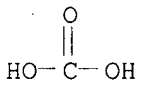
REFERENCE 7: 115:282932

REFERENCE 8: 111:118268

REFERENCE 9: 104:23314

REFERENCE 10: 98:88299

L8 ANSWER 6 OF 8 REGISTRY COPYRIGHT 2003 ACS
RN 17968-26-2 REGISTRY
CN Carbonic acid, magnesium salt (1:1), monohydrate (8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN Magnesium carbonate (MgCO3) monohydrate
MF **C H2 O3 . H2 O . Mg**
LC STN Files: CA, CAPLUS, GMELIN*
(*File contains numerically searchable property data)
CRN (463-79-6)



8 REFERENCES IN FILE CA (1962 TO DATE)
8 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 104:228808

REFERENCE 2: 90:62102

REFERENCE 3: 78:48520

REFERENCE 4: 71:27017

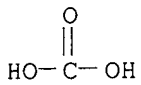
REFERENCE 5: 70:32912

REFERENCE 6: 69:28939

REFERENCE 7: 68:70743

REFERENCE 8: 67:120408

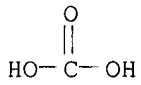
L8 ANSWER 7 OF 8 REGISTRY COPYRIGHT 2003 ACS
RN 14481-62-0 REGISTRY
CN Carbonic acid, magnesium salt, hydrate (8CI) (CA INDEX NAME)
MF **C H2 O3 . x H2 O . x Mg**
LC STN Files: GMELIN*
(*File contains numerically searchable property data)
CRN (463-79-6)



x Mg

x H_2O

L8 ANSWER 8 OF 8 REGISTRY COPYRIGHT 2003 ACS
RN 5145-46-0 REGISTRY
CN Carbonic acid, magnesium salt (1:1), trihydrate (8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN Magnesium carbonate (MgCO3) trihydrate
CN Magnesium carbonate trihydrate
MF **C H2 O3 . 3 H2 O . Mg**
LC STN Files: AGRICOLA, BIOSIS, CA, CAOLD, CAPLUS, GMELIN*, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)
CRN (463-79-6)



Mg

3 H_2O

97 REFERENCES IN FILE CA (1962 TO DATE)
2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
97 REFERENCES IN FILE CAPLUS (1962 TO DATE)
3 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 136:219810

REFERENCE 2: 136:218014

REFERENCE 3: 135:378823

REFERENCE 4: 135:51120

REFERENCE 5: 130:305482

REFERENCE 6: 130:155697

REFERENCE 7: 129:321843

REFERENCE 8: 129:56582

REFERENCE 9: 126:64146

REFERENCE 10: 126:26021

=> fil wpix
FILE 'WPIX' ENTERED AT 16:25:28 ON 24 APR 2003
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FILE LAST UPDATED: 10 APR 2003 <20030410/UP>
MOST RECENT DERWENT UPDATE: 200324 <200324/DW>
DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

Due to data production problems the WPI file had to be reset to update 200323. SDIs for update 24 will be rerun free of charge once the corrected data is loaded. Also answer sets created after April 10 may at least temporarily be affected and hence partially invalid.

>>> NEW WEEKLY SDI FREQUENCY AVAILABLE --> see NEWS <<<

>>> SLART (Simultaneous Left and Right Truncation) is now available in the /ABEX field. An additional search field /BIX is also provided which comprises both /BI and /ABEX <<<

>>> PATENT IMAGES AVAILABLE FOR PRINT AND DISPLAY <<<

>>> FOR DETAILS OF THE PATENTS COVERED IN CURRENT UPDATES, SEE http://www.derwent.com/dwpi/updates/dwpicov/index.html <<<

>>> FOR A COPY OF THE DERWENT WORLD PATENTS INDEX STN USER GUIDE, PLEASE VISIT:
http://www.stn-international.de/training_center/patents/stn_guide.pdf <<<

>>> FOR INFORMATION ON ALL DERWENT WORLD PATENTS INDEX USER GUIDES, PLEASE VISIT:
http://www.derwent.com/userguides/dwpi_guide.html <<<

=> d all abeq tech abex tot

L118 ANSWER 1 OF 14 WPIX (C) 2003 THOMSON DERWENT
AN 2003-229201 [22] WPIX
DNC C2003-058769
TI Immunological **adjuvant** composition comprising lipid phase and gel obtained by complexing polyvalent metal cation with anionic polymer, providing **vaccines** with good initial and long-term effectiveness.
DC A96 B04 D16
IN DUPUIS, L; TROUVE, G
PA (SEPP) SEPPIC SOC EXPL PROD IND CHIM
CYC 21
PI WO 2002080840 A2 20021017 (200322)* FR 23p A61K000-00 <--
RW: AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
W: JP US
FR 2823119 A1 20021011 (200322) A61K047-44 <--
ADT WO 2002080840 A2 WO 2002-FR1057 20020327; FR 2823119 A1 FR 2001-4644 20010405
PRAI FR 2001-4644 20010405
IC ICM **A61K000-00; A61K047-44**
ICS **A61K039-00**
ICI **A61K047-44, A61K047:06, A61K047:30**

AB WO 200280840 A UPAB: 20030402
NOVELTY - A new composition (I) comprises:
(a) a lipid phase; and
(b) an organometallic gel obtained by complexation of polyvalent metal cation(s) with anionic polymer(s).
DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for the production of (I).
USE - The use of (I) is claimed as **adjuvant** phase in a **vaccine** composition, the claims also cover the production of a **vaccine** using (I) as immunological **adjuvant** and a composition comprising at least one antigen (or compound inducing formation of a specific amino acid sequence in vivo) and (I) (claimed). (I) is especially useful for improving the immune response to viral, bacterial or parasitic antigens (e.g. rabies, Aujeszky's disease or foot and mouth disease virus, HIV, Escherichia coli, Pasteurella, Staphylococcus, Streptococcus, Trypanosoma, Plasmodium or Leishmania antigens), but may also be used with e.g. nucleic acid-based or anticancer **vaccines**.
ADVANTAGE - **Vaccines** containing (I) as **adjuvant** provide both a rapid onset of protection and a long-lasting protective effect against diseases.
Dwg.0/0
FS CPI
FA AB; DCN
MC CPI: A10-E21B; A12-V01; B04-B01B; B04-B01C; B04-B04C; B04-C02; B04-C02C; B04-C03; B05-A01B; B05-A03A; B05-B01P; B05-C04; B05-C08; B07-A02A; B07-A02B; B10-A07; B10-C02; B10-C04B; B10-C04E; B10-E04C; B10-G02; **B14-S11; D05-H07**
TECH UPTX: 20030402
TECHNOLOGY FOCUS - PHARMACEUTICALS - Preferred Lipids: The lipid phase (a) comprises one or more of animal, vegetable or mineral oils (specifically bleached mineral, peanut, olive, sesame, soya, wheat-germ, grape seed, sunflower, castor, linseed, copra, palm, walnut, hazelnut or rape oil, olive squalane or squalene or fish liver extract), alkyl (specifically 1-4C alkyl) esters of these oils, fatty acid alkyl esters (specifically esters of 12-22C fatty acids, preferably myristate, palmitate, oleate, rincoleate or isostearate esters, especially ethyl oleate, methyl oleate, isopropyl myristate or octyl palmitate), fatty acid esters of polyols (specifically mono-, di- or triglycerides or esters of polyglycerol, propylene glycol, hexols (especially sorbitol or mannitol) or anhydro-hexols (especially sorbitan or mannitan)) or fatty alcohol ethers of polyols.
Preferred Composition: (I) is an emulsion, preferably containing the lipid phase (a) at 5-70 (preferably 15-60) wt. % as the continuous phase (in which the gel (b) is dispersed). (I) optionally also contains surfactant(s), specifically nonionic surfactants selected from polyglycerol esters sugar esters (e.g. sorbitan, mannitan or sucrose esters), ethoxylated sugars, ethoxylated fatty acids or esters, mono- or diglycerides modified by reaction with acetic or lactic acid, ethoxylated mono-, di- or triglycerides or sugar ethers (e.g. glucose, xylose or lactitol ethers). The surfactant (or surfactant mixture) specifically has HLB 4-12 (especially 5-8); and is contained in (I) at 0.5-10 (preferably 1-5) wt. %.
Preparation: Claimed preparation of (I) involves:
(i) preparing an aqueous solution or suspension containing insoluble polyvalent cation salt(s), soluble anionic polymer(s) and optionally hydrophilic surfactant(s);
(ii) emulsifying the obtained suspension with an oil phase, optionally containing lipophilic surfactant;
(iii) if necessary solubilizing the salt by adjusting the pH of the emulsion;
(iv) optionally adding an excess of the cation; and
(v) neutralizing the emulsion. In a variant the obtained emulsion is

dissolved in a solvent for the lipid phase to give a suspension of the gel, which is centrifuged to isolate the gel.

TECHNOLOGY FOCUS - POLYMERS - Preferred Gels: The gels (b) are obtained by mixing appropriate amounts of a solution or suspension of the cation(s) (preferably di- or trivalent cations, especially calcium, magnesium, zinc, trivalent iron or aluminum) and a solution or suspension of the polymer(s) (preferably sulfated polymer, dextran, carrageenate, carboxylated polymer, polyacrylate, pectin, alginate, natural gum, xanthan gum or guar gum, especially sodium alginate), optionally under stirring, preferably in an aqueous medium. The cation is specifically used as 0.001-10 (preferably 0.1-1) M solution or suspension of the hydroxide, carbonate, citrate, gluconate, glucoheptonate, fructoheptonate, lactate, acetate, salicylate or glycerophosphate salt. The salt is especially calcium hydroxide, **magnesium carbonate**, manganese carbonate, calcium gluconate, manganese gluconate, manganese glycerophosphate, zinc gluconate, calcium fructoheptonate, aluminum salicylate or aluminum acetate, particularly manganese glycerophosphate (optionally mixed with manganese gluconate). The cation is specifically used as 0.1-10 (preferably 1-5) wt. % solution or suspension.

ABEX UPTX: 20030402

EXAMPLE - A 3.5% solution of Saltialgine S80 (RTM; low viscosity sodium alginate with high guluronic acid content) and a 500 microM suspension of manganese glycerophosphate were prepared. A mixture of 1 ml of the suspension, 20 ml of the solution and 1.05 g Montanox 80 (RTM; polyoxyethylene (80) sorbitan oleate; HLB 15) was dispersed in 100 g of Marcol 52 (RTM; bleached mineral oil) containing 5 weight % Montane 80 (RTM; sorbitan monooleate; HLB 4.3) under stirring at 3000 rpm for 3 minutes, the overall HLB of the surfactant system being 6. The obtained emulsion was neutralized with a few drops of concentrated acetic acid (to solubilize the manganese glycerophosphate and form manganese alginate complex) then neutralized to pH 5.5 with sodium hydroxide, giving an **adjuvant** emulsion (Ia) consisting of a continuous oil phase and dispersed manganese alginate gel. The effectiveness of (Ia) was tested in mice, using **vaccines** containing ovalbumin as antigen and (Ia) as **adjuvant**. A combination of equal amounts of **vaccine** and **adjuvant** gave IgG1 titers of 64000, 64000 and 96000 after 28, 56 and 90 days respectively and IgG2a titers of 2400, 16000 and 24000 after 28, 56 and 90 days respectively. For comparison, the antigen alone gave both IgG1 and IgG2a titers of 100, 1000 and 100 after 28, 56 and 90 days respectively.

L118 ANSWER 2 OF 14 WPIX (C) 2003 THOMSON DERWENT
AN 2002-698585 [75] WPIX
DNC C2002-197797
TI Composition for controlled release **injections** using soluble glass microspheres suspended in anhydrous liquid.
DC A96 B07
IN ROSER, B J; ROSER, B
PA (ROSE-I) ROSER B J; (CAMB-N) CAMBRIDGE BIOSTABILITY LTD; (IDEA-N) IDEA INC
CYC 100
PI WO 2002066005 A1 20020829 (200275)* EN 23p A61K009-00 <--
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW
US 2002155129 A1 20021024 (200277) A61K039-12 <--
ADT WO 2002066005 A1 WO 2002-US4269 20020214; US 2002155129 A1 US 2001-784153 20010216
PRAI US 2001-784153 20010216

IC ICM **A61K009-00; A61K039-12**
ICS **A61K009-14; A61K009-16; A61K039-02**

AB WO 200266005 A UPAB: 20021120
NOVELTY - A composition for controlled release **injections** comprises soluble glass microspheres containing a drug or **vaccine**, suspended in anhydrous liquid.

DETAILED DESCRIPTION - An **injectable** composition comprises a stabilized drug or **vaccine** in soluble glass microspheres, suspended in an anhydrous liquid, where the drug or **vaccine** is protected against dissolution while surrounded by anhydrous liquid, extending the duration of action of the drug or the triggering of the immune response by the **vaccine**, long after **injection** by slowly releasing the drug or **vaccine**.

An INDEPENDENT CLAIM is included for a method of formulating a drug or **vaccine** to prolong the duration of action, by incorporating the drug or **vaccine** in soluble glass microspheres, and suspending the microspheres in an anhydrous liquid.

USE - This method of delivery is for the administration of drugs and **vaccines**.

Dwg.0/2

FS CPI

FA AB; DCN

MC CPI: A12-V01; B04-B01B; B04-B04M; B04-C02; B04-C03D; B04-D01; B04-E01; B04-F06; B04-F10; B04-F11; B04-N04; B04-N05; B05-A01B; B05-A03; B05-B01B; B05-B02A; B05-B02A3; B05-C07; B05-C08; B07-A02B; B10-A07; B10-H02B; B12-M03; B12-M10A; B12-M11E; B12-M11G; B14-A01; B14-C01; B14-C03; B14-D01; B14-F01; B14-F02; B14-F04; B14-F08; B14-G02; B14-G03; B14-H01B; B14-J01; B14-P01; **B14-S11**

TECH UPTX: 20021120
TECHNOLOGY FOCUS - PHARMACEUTICALS - Preferred Drugs: The drug is a hormone, analgesic, narcotic, narcotic antagonist, chemotherapeutic, immunosuppressant, growth or differentiation regulator or factor, immunomodulator, contraceptive, vasoactive agent, coagulation modifier, cardioactive, antiinflammatory or CNS drug. The **vaccine** is selected from toxins, toxoids, live or killed bacteria, live or killed viruses, live or killed protozoa, recombinant proteins, DNA, RNA, polysaccharides, lipoproteins and lipids and recombinant or synthetic peptides, particularly tetanus toxoid. The **vaccine** may be adsorbed to an **adjuvant** such as aluminium hydroxide, aluminium phosphate or calcium phosphate.
Preferred Composition: The glass microspheres contain an amount of an insoluble biocompatible high-density agent (including calcium phosphate, aluminium phosphate, aluminium hydroxide, barium sulfate or **titanium dioxide**) sufficient to raise the average density of the microspheres to match that of the anhydrous liquid in which they are suspended.

TECHNOLOGY FOCUS - ORGANIC CHEMISTRY - Preferred Microspheres: The microspheres comprise non-reducing sugars (such as sucrose, trehalose, raffinose or stachyose) and sugar alcohols (such as mannitol, arabinitol, inositol, glucitol, galactitol, xylitol, maltitol, lactitol, glucopyranosyl sorbitol or glucopyranosyl mannitol), metal carboxylates and phosphate glasses. They may be produced by spray-drying, air drying, vacuum drying, emulsion solidification, precipitation or melting and grinding to a fine powder.
Preferred Liquids: The liquid is an anhydrous hydrophilic or hydrophobic liquid, anhydrous silicone fluid or anhydrous perfluorocarbon such as perfluorohexane, perfluorodecalin, perfluorooctane or perfluorophenanthrene.

ABEX UPTX: 20021120
ADMINISTRATION - The administration is by **injection**.
EXAMPLE - Groups of 10 guinea pigs were **injected** with:
(A) fresh liquid **vaccine**;

(B) **vaccine** dried into a powder of sugar glass microspheres and rehydrated with water immediately before **injection**;
(C) **vaccine** dried into a powder of sugar glass microspheres suspended in 0.5 ml squalane oil;
(D) **vaccine** dried into a powder of sugar glass microspheres suspended in 0.5 ml perfluorodecalin; or
(E) a powder of sugar glass microspheres not containing **vaccine** suspended in 0.5 ml perfluorodecalin.
The antibody titre in groups (A) and (B) fell at 12 weeks after **injection**. The titre in groups (C) and (D) did not fall at 12 weeks. There was no antibody response in groups (A) or (E).

L118 ANSWER 3 OF 14 WPIX (C) 2003 THOMSON DERWENT
AN 2002-619200 [66] WPIX
DNC C2002-174954
TI Method of enhancing the immune response of a patient relative to the normal immune response involves converting aspartic acid residue or asparigine residue to isoaspartic acid residue.
DC B04 D16
IN MAMULA, M J
PA (UYYA) UNIV YALE
CYC 99
PI WO 2002060390 A2 20020808 (200266)* EN 28p A61K000-00 <--
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW
ADT WO 2002060390 A2 WO 2002-US336 20020104
PRAI US 2001-259765P 20010104
IC ICM **A61K000-00**
AB WO 200260390 A UPAB: 20021014
NOVELTY - Enhancing the immune response of a patient relative to the normal immune response (M1) involves: converting aspartic acid residue or asparigine residue present in tumor antigen, bacterial protein or viral protein (A) while growing cells containing (A) to isoaspartic acid residue for producing an isoaspartic acid containing (A) and administering it to the patient.

DETAILED DESCRIPTION - Enhancing the immune response of a patient relative to the normal immune response (M1) involves: converting aspartic acid residue or asparigine residue present in tumor antigen, bacterial protein or viral protein (A) while growing cells containing (A) to isoaspartic acid residue for producing an isoaspartic acid containing (A) and administering it to the patient.
(M1) involves:

(a) either growing cells containing a tumor antigen, bacterial protein or viral protein under conditions; and converting an aspartic acid residue (a) or an asparigine residue (b) in the tumor antigen, bacterial or viral protein to isoaspartic acid residue (c) for producing isoaspartic acid-containing tumor antigen, bacterial or viral protein (I);

(b) optionally isolating (I); and

(c) administering (I) to the cells of a patient to enhance the immune response of the patient; or The method involves treatment of the tumor antigen, bacterial protein, or viral protein or its fragment to convert (a) or (b) to produce (I) and administering (I) to elicit the enhanced immune response.

INDEPENDENT CLAIMS are included for the following:

(1) enhancing the immune response of a patient relative to the normal immune response (M2) involving: administration of a peptide comprising 9 - 40 amino acid residues of a tumor antigen, bacterial protein or viral protein to the patient. The peptide comprises (a) or (b) that has been replaced by (c);

(2) a **vaccine** (II) comprising a protein or its fragment containing (c) and a carrier. The protein is tumor antigens, bacterial proteins and/or viral proteins; and

(3) an antibody (III) reactive with the protein or its fragments.

ACTIVITY - Antibacterial; Virucide; Antitumor.

MECHANISM OF ACTION - **Vaccine**; Inhibitor; Stimulator of the immune response.

Test details are described but no specific results are given.

USE - (M1) is useful for enhancing the immune response of a patient relative to the normal immune response; as **vaccine** or antibody (claimed); for treating solid tumor masses (e.g. carcinomas and sarcomas), murine B16 melanoma, P815 murine mastocytoma, PTAS murine mammary carcinoma, colon rectal carcinoma, adenocarcinoma, glioblastoma multiform and astrosarcoma, cervical carcinoma, lung carcinomas, lymphomas (Hodgkin's and non-Hodgkin's), fibrosarcoma, myeloma); for treating bacteria such as Bacillus anthracus, Mycobacterium, Streptococcus, Staphylococcus, Neisseria, Chlamydia, Haemophilus, Borrelia burgdorferi; for treating virus e.g. Hepatitis A, Hepatitis B, Hepatitis C, Rabies, HIV, influenza, Measles, Rotavirus, Herpes simplex virus.

ADVANTAGE - The method enhances the immune response of a patient relative to the normal immune response; identifies the weakly antigenic proteins found on tumors, bacterias and viruses. The method provides **vaccine** and antibody, which selects and eliminates these weakly antigenic species.

Dwg.0/5

FS CPI

FA AB; DCN

MC CPI: B04-B04C2; B04-F02A; B04-F10; B04-F11; B04-G01; B04-N03; B05-A01B; B05-B02C; B05-C08; B07-A02B; B14-A01; B14-A02; B14-H01; B14-L01; B14-L06; **B14-S11**; **D05-H07**; D05-H08; D05-H11

TECH UPTX: 20021014

TECHNOLOGY FOCUS - BIOLOGY - Preferred Method: The growing step involves exposing the cells containing the tumor antigen, bacterial protein or viral protein to adenosine dialdehyde under 15 - 30 microM adenosine dialdehyde at approximately 25 - 40 degrees Centigrade for 1 - 5 days. The treating step involves exposing the tumor antigen, bacterial protein or viral protein or its fragment to acidic methanol or carbon dioxide (1 - 20%).

Preferred Cells: The tumor cells are selected from murine B16 melanoma, P815 murine mastocytoma, PTAS murine mammary carcinoma, colon rectal carcinoma, adenocarcinoma, glioblastoma multiform and astrosarcoma, cervical carcinoma, lung carcinoma, lymphomas, fibrosarcoma or myeloma. The tumor antigen is MART-1 (Melan-A), gp100 (pmel-17), tyrosinase, tyrosinase related protein-1 (TRP-1), tyrosinase related protein-2 (TRP-2), melanocyte-stimulating hormone receptor, beta-catenin, MUM-1, CDK-4, Caspase-8, KIA0205, MAGE-1, MAGE-2, MAGE-3, MAGE-12, BAGE, GAGE, Ny-ESO-1, alpha-Fetoprotein, telomerase catalytic protein, G-250, MUC-1, carcinoembryonic antigen (CEA), p53 or Her-2/neu. The bacterial cells are selected from Bacillus, Mycobacterium, Streptococcus, Staphylococcus, Neisseria, Chlamydia, Haemophilus, and Borrelia burgdorferi. The viruses are Hepatitus A, Hepatitus B, Hepatitus C, Rabies, HIV, influenza, Measles, Rotavirus or Herpes simplex.

Preferred Proteins: The bacterial protein is PhoE, OmpF, OmpC, LamB, O-antigens, lipoproteins, flagella proteins or bacterial adhesions. The viral protein is HIV gp120, gp41, Hepatitis B surface antigens (HBsAg), core antigen (HbcAg) or capsid proteins.

TECHNOLOGY FOCUS - ORGANIC CHEMISTRY - Preferred Components: (a) or (b) comprises an amino acid sequence selected from Asn-Gly, Asn-Ser, Asp-Gly or Asp-Ser. The peptide comprises 9 - 25 (preferably 9 - 15) amino acid residues. The peptide has a sequence Tyr-Met-Asp-Gly-Thr-Met-Ser-Gln-Val.

Preferred Carrier: The carrier is solid carrier material, electrolyte solutions, anal suppositories, topical creams, sublingual lozenges, water

soluble jellies, enema solutions, inhalable aerosols and/or intravenous **injections** or is **magnesium carbonate**, magnesium stearate, talc, sugar, lactose, cocoa butter, and/or water.

TECHNOLOGY FOCUS - POLYMERS - Preferred Carrier: The carrier is pectin, dextrin, starch gelatin, tragacanth, methylcellulose, sodium carboxymethylcellulose, and/or low melting waxes.

ABEX UPTX: 20021014

ADMINISTRATION - The **vaccine** or composition containing (I) is administered intravenously, intramuscularly, intracutaneously, subcutaneously, subdermally, intraperitoneally, by inhalation, or intranasally. The dosages of (I) are 0.5 - 15 mg/kg.

EXAMPLE - Mice were immunized with either isoaspartyl modified tumor cell lysate or unmodified tumor cell lysate. After 14 days, purified CD8 T cells were purified from mice and incubated for 7 days with irradiated B16 tumor cells and interleukin-2. After 7 days, T cells were re-purified and incubated with labeled B16 melanoma cell targets at 20:1 (effector T cell:tumor cell ratio). Percent lyris was measured by the release of intracellular label as compared to control B16 cell cultures. The results showed that the CD8 T cell from isoaspartyl immunized mice had approximately 20 - 25% of tumor cell killing activity, while the control untreated animals had less than 5% killing activity of the target B16 cells.

L118 ANSWER 4 OF 14 WPIX (C) 2003 THOMSON DERWENT
AN 2002-454534 [48] WPIX
DNC C2002-129220
TI Use of adhesion protein from yersinia genus or its fragment in new **adjuvant** composition useful as medicament in treatment of e.g. allergy.
DC B04 D16
IN HERMAND, P; VANDE VELDE, V
PA (SMIK) SMITHKLINE BEECHAM BIOLOGICALS
CYC 95
PI WO 2002030458 A1 20020418 (200248)* EN 46p A61K039-39 <--
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
AU 2001062163 A 20020422 (200254) A61K039-39 <--
ADT WO 2002030458 A1 WO 2001-EP3786 20010326; AU 2001062163 A AU 2001-62163 20010326
FDT AU 2001062163 A Based on WO 200230458
PRAI GB 2000-25058 20001012
IC ICM **A61K039-39**
ICS **A61P031-00; A61P033-00; A61P035-00**
AB WO 200230458 A UPAB: 20020730
NOVELTY - An **adjuvant** composition (I) comprises an adhesion protein from Yersinia genus or its fragment.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:
(1) a **vaccine** composition comprising the **adjuvant** further comprising an antigen or antigen composition; and
(2) use of Yersinia adhesion protein in the manufacture of (I).
ACTIVITY - Antibacterial; Virucide; Antiallergic; Cytostatic; Immunosuppressive; Antiarteriosclerotic; Nootropic; and Neuroprotective.
MECHANISM OF ACTION - None given.
USE - As medicament in the treatment of or in the manufacture of a mucosal **vaccinal** for the treatment of viral, bacterial, parasitic infections, allergy, cancer (claimed) such as prostate, breast,

colorectal, lung, pancreatic, renal, ovarian and melanoma, autoimmune disease, other non-chronic disorders, chronic disorders such as atherosclerosis and Alzheimer.

ADVANTAGE - The **adjuvant** induces or boosts immune responses to co-administered antigens. The **adjuvant** systems are safe and potent and are easy to manufacture. The **adjuvant** system exhibits good safety profile and is well tolerated by patients.

Dwg.0/0

FS CPI

FA AB; DCN

MC CPI: B04-F10A; B04-F10B; B04-F11; B14-A01; B14-A02; B14-B02; B14-G03; B14-H01; B14-J01A4; **B14-S11**; **D05-H07**; D05-H17A6

TECH UPTX: 20020730

TECHNOLOGY FOCUS - BIOLOGY - Preferred Composition: The composition optionally comprises a carrier. The composition additionally comprises another immunostimulant. The **adjuvant**:antigen is in a ratio of 1:1000 - 1000:1. The composition further comprises an excipient or diluent.

Preferred Components: The adhesion protein is encoded by the inv gene of Yersinia pseudotuberculosis, the inv gene of Yersinia enterocolitica or by ail gene of Yersinia enterocolitica. The immunostimulant is 3D-MPL, QS21, CpG, polyoxyethylene ether or ester. The antigen is optionally linked to the **adjuvant** through a direct or indirect linkage. The antigen is human immunodeficiency virus, varicella zoster virus, herpes simplex virus type 1, herpes simplex virus type 2, human cytomegalovirus, dengue virus, hepatitis A, B, C or E, respiratory syncytial virus, human papilloma virus, influenza virus, hib, meningitis virus, salmonella, neisseria, borrelia, chlamydia, bordetella, enterotoxic E. coli, campylobacter, streptococcus, moraxella, mycoplasma, mycobacteria, haemophilius, plasmodium or toxoplasma, standworth decapeptide or tumor associated antigen (TAA), MAGE, BAGE, GAGE, MUC-1, Her-2 neu, LnRH, CEA, PSA, PSMA, PAP, prostase, KSA, tyrosinase or PRAME or is Lipo-OspA from Borrelia burgdorferi, campylobacter whole cells or tetanus toxoid.

TECHNOLOGY FOCUS - INORGANIC CHEMISTRY - Preferred Components: The carrier is metallic salt particle such as aluminum phosphate, aluminum hydroxyde, calcium phosphate, magnesium phosphate, iron phosphate, calcium carbonate, **magnesium carbonate**, calcium sulfate, magnesium hydroxyde or double salts such as ammonium-iron phosphate, potassium-iron phosphate, calcium-iron phosphate, calcium-**magnesium carbonate** or a porous polymeric particle such as microbead or nanoparticle.

ABEX UPTX: 20020730

WIDER DISCLOSURE - The expression vectors are also disclosed as new.

ADMINISTRATION - The **adjuvant** system is administered mucosally, systemically or **parenterally** (including intramuscularly, intradermally, transdermally, subcutaneously, intraperitoneally or intravenously), orally, nasally vaginally or rectally in a dosage of 1-1000 (preferably 1-500, especially 1-100) microg/dose.

EXAMPLE - No relevant example given.

L118 ANSWER 5 OF 14 WPIX (C) 2003 THOMSON DERWENT

AN 2002-382792 [41] WPIX

DNC C2002-107821

TI Sustained release composition for treating e.g. multiple sclerosis, comprises microparticles containing an active agent, a biocompatible polymer and a water-soluble polymer.

DC A96 B04 D16

IN SCHER, D S; TRACY, M A

PA (ALKE-N) ALKERMES CONTROLLED THERAPEUTICS

CYC 97

PI WO 2002015877 A2 20020228 (200241)* EN 38p A61K009-00 <--
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
AU 2001085143 A 20020304 (200247) A61K009-00 <--

ADT WO 2002015877 A2 WO 2001-US26094 20010821; AU 2001085143 A AU 2001-85143 20010821

FDT AU 2001085143 A Based on WO 200215877

PRAI US 2000-644631 20000823

IC ICM **A61K009-00**

AB WO 200215877 A UPAB: 20020701

NOVELTY - A sustained release composition comprising microparticles containing an antigen or a labile agent, a biocompatible polymer and a water soluble polymer representing 20 % of the dry weight of microparticles, is new.

DETAILED DESCRIPTION - A new sustained release composition comprises microparticles containing an antigen or a labile agent, a biocompatible polymer and a water soluble polymer representing 20 % of the dry weight of microparticles, where the microparticles have a number median diameter of greater than 20 microns upon administration and generate pseudo-microparticles upon hydration having a number median diameter of less than 20 microns.

ACTIVITY - Immunosuppressive; Dermatological; Antiinflammatory; Neuroprotective; Antiviral; Antibacterial; Antiprotozoal; Antifungal; Antiallergic. No suitable biological data is given.

MECHANISM OF ACTION - Systemic immune response stimulator; Immune response modulator; **Vaccine.**

USE - The composition is used:

(i) for stimulating a systemic immune response to an antigen representing cell (e.g. dendritic cell or macrophage Kupffer cell, aveolar macrophage, microglial cell, splenic macrophage and/or macrophage in the Peyer's of the gut) in a mammal;

(ii) for the systemic delivery of a labile agent to a mammal; and

(iii) for modulating an immune response of the composition (all claimed).

It is also used for the targeted delivery of biological active agents to specific tissue and cells and for treating autoimmune disease e.g. systemic lupus erythematosus and multiple sclerosis and treatment of conditions exacerbated by the activity of macrophages e.g. schistosomiasis.

ADVANTAGE - The composition provides the dissolution of the water-soluble polymer at a much greater rate than the degenerative of the biocompatible polymer. This variance in solubility generates pseudo-microparticles having a number mean diameter of at most about 20 (preferably at most 10 especially 1 - 5) microns which is substantially smaller than the size of the administered microparticles (number median diameter of at least 20 microns). The generation of pseudo-microparticles overcomes the problems associated with the processing and handling of small microparticles. A small delivery device is needed to obtain delivery of sufficient levels of the agent. A single dose of the composition is sufficient to result in long term and even permanent immunity to the incorporated antigen.

Dwg.0/2

FS CPI

FA AB; DCN

MC CPI: A12-V01; B04-B03C; B04-B04C; B04-C03; B04-H01; B04-H02; B04-H04B; B04-H04C; B04-H05; B04-H06; B04-H06F; B04-H08; B04-H09; B04-H13; B04-N04; B05-A01A; B05-A01B; B05-A03A; B07-A02A; B10-D01; B14-A01; B14-A02; B14-A03; B14-A04; B14-B03; B14-C03; B14-G01; B14-G02A; B14-J01; B14-J02; B14-N17C; B14-S01; **B14-S11**;

D05-H07; D05-H10; D05-H18

TECH UPTX: 20020701

TECHNOLOGY FOCUS - PHARMACEUTICALS - Preferred Composition: The composition is enterically coated and further comprises a cytokine and a metal cation component dispersed within the biocompatible polymer. TECHNOLOGY FOCUS - BIOLOGY - Preferred Components: The cytokine is selected from interleukin (IL)-1(alpha or beta), IL-2, IL-3, IL-4, IL-5, IL-6, IL-7, IL-8, IL-9, IL-10, IL-11, IL-12, granulocyte macrophage-colony stimulating factor (GM-CSF), M-CSF, leukemia inhibitory factor (LIF), leukotriene (LT), transforming growth factor (TGF)-beta, gamma-IFN (interferon), alpha-IFN, -beta-IFN, tumor necrosis factor (TNF)alpha, B Cell Growth Factors (BCGF), CD2 ICAM (intercellular adhesion molecule) MAdCAM or monocyte chemotactic protein (MCP)-1-3. The cytokine and antigen are co-incorporated into the microparticles or incorporated into separate microparticles. The separate microparticles are administered simultaneously or sequentially. The antigen is an allergen, viral antigen, bacterial antigen, protozoan antigen or a fungal antigen, (preferably influenza antigen, respiratory syncytial antigen, parainfluenza virus, helminthic pathogen antigen, Staphylococcus antigen, Hemophilius antigen or an antigen to **vaccinate** against allergies, especially a DNA-based **vaccine**, comprising plasmid DNA. The antigen is present at a concentration (w/w.%) of 0.01 - 50 (preferably 0.01 - 30). The labile agent is a protein, polypeptide or oligonucleotide (preferably a protein).

TECHNOLOGY FOCUS - POLYMERS - Preferred Polymer: The water-soluble polymer is a nonionic surfactant (preferably poloxamers, polysorbates, polyethyleneglycols and/or polyvinylpyrrolidones especially poloxamer 188 and/or poloxamer 407 or polysorbate 80 and/or polysorbate 20). The water-soluble polymer (%) is present in an amount at least 40 (preferably 40 - 60, especially 40 - 50). The biocompatible polymer is biodegradable and is selected from poly(lactide)s, poly(glycolide)s, poly(lactide-coglycolide)s, poly(lactic acid)s, poly(glycolic acid)s, poly(lactic acid-co-glycolic acid)s, poly(caprolactone), polycarbonates, polyestermide, polyanhydrides, poly(amino acid)s, poly(ortho esters)s, polycyanoacrylates, polyamides, polyacetals, poly(ether ester)s, copolymers of poly(ethylene glycol) and poly(ortho ester)s, poly(dioxanone)s, poly(alkylene alkylate)s, biodegradable polyurethanes, blends and/or copolymers (preferably poly(lactide-co-glycolide).

TECHNOLOGY FOCUS - INORGANIC CHEMISTRY - Preferred Components: The labile agent is complexed to a stabilizing metal cation. The metal cation is selected from Zn+2, Ca+2, Cu+2, Mg+2 and/or K+. The metal cation component is dispersed within the biocompatible polymer and is selected form **Mg(OH)2**, **MgCO3**, CaCO3, ZnCO3, Mg(OAc)2, Zn(OAc)2, ZnSO4, MgCl2, ZnCl2, MgSO4, zinc citrate or magnesium citrate.

Preparation: The composition is produced by standard chemical techniques.

ABEX UPTX: 20020701

SPECIFIC COMPOUNDS - Bordetella pertussis, Neisseria gonorrhea, Streptococcus pneumoniae and Plasmodium falciprum are specifically claimed as the antigen.

ADMINISTRATION - The composition is administered orally or **parenterally** (claimed) e.g. by inhalation or **injection**, implantation (e.g. subcutaneously, intramuscularly, intraperitoneally, intracranially or intradermally), intravaginally, intrapulmonary, bucally or by a suppository or by in situ delivery e.g. enema or aerosol spray.

EXAMPLE - Trehalose containing microparticles were prepared using a poly(lactide-Co-glycolide)(PLG) (10 w/v%) solution in methylene chloride in the polymer solution. A portion of microparticles were incubated for 2 hours at 37 degrees Centigrade in pH 7.2 phosphate buffered saline (sodium

phosphate (50 mM), NaCl (100 mM), sodium azide (0.02 %)). The buffer was removed and the microparticles were dried by lyophilization. The pre-hydration and post-hydration particle size (micrometers) of the microparticles were 47.6 and 1.4 respectively.

L118 ANSWER 6 OF 14 WPIX (C) 2003 THOMSON DERWENT
AN 2002-257549 [30] WPIX
DNC C2002-076670
TI New solid dose **vaccine** formulation in the form of a quick dissolving cake useful for oral administration in the treatment of melanoma comprises an antigen and an excipient.
DC B04 D16
IN VANDE-VELDE, V
PA (SMIK) SMITHKLINE BEECHAM BIOLOGICALS
CYC 95
PI WO 2002013858 A1 20020221 (200230)* EN 32p A61K039-39 <--
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
AU 2001086168 A 20020225 (200245) A61K039-39 <--
ADT WO 2002013858 A1 WO 2001-IB1711 20010814; AU 2001086168 A AU 2001-86168 20010814
FDT AU 2001086168 A Based on WO 200213858
PRAI GB 2000-20089 20000815
IC ICM **A61K039-39**
ICS **A61K009-20; A61K039-00; A61K039-02; A61K039-12**
AB WO 200213858 A UPAB: 20020621
NOVELTY - An oral solid dose **vaccine** composition comprises an antigen and an excipient. The **vaccine** is in the form of a quick dissolving cake.
ACTIVITY - Cytostatic; Antiallergic; Antitumor; Immunostimulant. No biodata is provided in the source material.
MECHANISM OF ACTION - **Vaccine.**
USE - For oral administration in the treatment of immunotherapeutic treatment of cancer, melanoma; for the prophylaxis or therapy of allergy. For treatment of tumor. For eliciting and stimulating an immune response against a human pathogen.
ADVANTAGE - The formulation after insertion into mouth, rapidly dissolves in saline, thus releasing the **vaccine** into the mouth.
Dwg.0/0
FS CPI
FA AB; DCN
MC CPI: B04-B04C2; B04-C02; B04-C02C; B04-C02D; B04-C03; B05-A01B; B05-C04; B07-A02A; B07-A02B; B10-A07; B12-M11; B12-M11B; B14-A02A; B14-A02B; B14-G01; B14-G02A; B14-H01; **B14-S11**; **B14-S11C**; **D05-H07**
TECH UPTX: 20020513
TECHNOLOGY FOCUS - PHARMACEUTICALS - Preferred Components: The composition comprises an antacid, dextran, binding agent, pseudoplastic excipient, thixotropic agent, live attenuated or viral **vaccine** or stabilizing glass forming polyol. The composition additionally comprises sorbitol and **adjuvant** selected from LT, CT, 3D-MPL, CpG, or QS21.
Preferred Method: The cake is formed by sublimation of a liquid **vaccine** composition.

TECHNOLOGY FOCUS - INORGANIC CHEMISTRY - Preferred Antacid: The antacid is aluminum hydroxide and/or **magnesium hydroxide** or calcium carbonate.

TECHNOLOGY FOCUS - ORGANIC CHEMISTRY - Preferred Components: The polyol is trehalose, sucrose, lactose, fructose, galactose, mannose, maltulose, iso-maltulose, lactulose, maltose, dextrose or their respective sugar alcohol (preferably mannitol, lactitol or maltitol).

TECHNOLOGY FOCUS - BIOLOGY - Preferred Antigen: The antigen or antigen composition is derived from Human Immunodeficiency Virus, Varicella Zoster virus, Herpes Simplex Virus type 1, Herpes Simplex Virus type 2, human cytomegalovirus, Dengue virus, Hepatitis A, B, C or E, Respiratory Syncytial virus, Human papilloma virus, Influenza virus, Hib, Meningitis virus, Salmonella, Neisseria, Borrelia, Chlamydia, Bordetella, Plasmodium or Toxoplasma, stanworth decapeptide or tumor associated antigens (TMA), MAGE, BAGE, GAGE, MUC-1, Her-2 neu, LnRH, CEA, PSA, KSA or PRAME.

TECHNOLOGY FOCUS - POLYMERS - Preferred Components: The pseudoplastic excipient is xanthan gum. The binding agent is dextran. The composition comprises xanthan gum, dextran and calcium hydroxide or aluminum hydroxide.

ABEX UPTX: 20020513

ADMINISTRATION - The **vaccine** composition is administered orally (claimed) in a dosage of 1 - 1000 (preferably 1 - 500, especially 1 - 100; particularly 1 - 50) microg of protein.

EXAMPLE - Frozen purified viral bulk was thawed and diluted with Dulbecco's modified eagle medium (106.2 ffu/ml). Aluminum hydroxide was added to reach a final quantity of 48 mg/dose and virus composition was diluted with sucrose (4%) up to the target titer of 105.6 ffu/dose. An aseptic filling operation was employed to transfer doses of plastic blister cavities (0.5 ml). Thus the formulation contained sucrose (4%), sodium glutamate (3.7%) and aluminum hydroxide (3.48 mg). The composition was lyophilized and the blister cavities were sealed by thermic sealing. The formulation was tested for virus titer before and after lyophilization into a cake and stored before and after titer lyophilization of 1 week at 37 degrees C. The viral titer before and after lyophilization for 1 week at 37 degrees C was 105.11 and 104.53 respectively. These formulation rapidly dissolved in the mouth.

L118 ANSWER 7 OF 14 WPIX (C) 2003 THOMSON DERWENT
AN 2002-188810 [24] WPIX
DNC C2002-058450
TI **Adjuvant** useful in **parenteral vaccine**
formulation which generates immune response, comprises salt(s) formed with e.g. magnesium, calcium, strontium, barium, radium, titanium, zirconium, hafnium, or rutherfordium.
DC B04 B06
IN AASMUL-OLSEN, S; LUND, L; RAHBEK, J U; SONI, N K
PA (ALKA-N) ALK-ABELLO AS
CYC 96
PI WO 2002011760 A1 20020214 (200224)* EN 53p A61K039-39 <--
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
US 2002051794 A1 20020502 (200234) A61K039-00 <--
AU 2001079601 A 20020218 (200244) A61K039-39 <--
ADT WO 2002011760 A1 WO 2001-DK532 20010809; US 2002051794 A1 Provisional US 2000-224037P 20000809, US 2001-925635 20010809; AU 2001079601 A AU 2001-79601 20010809
FDT AU 2001079601 A Based on WO 200211760
PRAI US 2000-224037P 20000809; **DK 2000-1194 20000809**
IC ICM **A61K039-00; A61K039-39**

ICS **A61K039-38; A61K045-00; A61K047-00; A61P037-04**

AB WO 200211760 A UPAB: 20020416
NOVELTY - An **adjuvant** (A) comprises salt(s) formed with magnesium, calcium, strontium, barium, radium, titanium, zirconium, hafnium, or rutherfordium or their hydrates, provided that the salt is not calcium phosphate, is not **magnesium hydroxide** in combination with aluminum hydroxide or aluminum oxide and is not calcium hydroxide in gel combination with zinc hydroxide, lecithin and polyalphaolefine.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

(1) a **parenteral vaccine** formulation comprising at least one immunogenic substance and (A);

(2) (A) for **parenteral** use;

(3) use of salt(s) formed with magnesium, calcium, strontium, barium, radium, titanium, zirconium, hafnium, or rutherfordium or their hydrates, as a component of an **adjuvant** composition, provided that the salt is not calcium phosphate, is not **magnesium hydroxide** in combination with aluminum hydroxide or aluminum oxide and is not calcium hydroxide in gel combination with zinc hydroxide, lecithin and polyalphaolefine;

(4) generating immune response in a subject comprising administering the **parenteral vaccine** formulation; and

(5) preparation of **parenteral vaccine** formulation comprising adding liquid to a dry foam of or a pre-formed gel of the salt formed with magnesium, calcium, strontium, barium, radium, titanium, zirconium, hafnium, or rutherfordium or their hydrates, (provided that the salt is not calcium phosphate, is not **magnesium hydroxide** in combination with aluminum hydroxide or aluminum oxide and is not calcium hydroxide in gel combination with zinc hydroxide, lecithin and polyalphaolefine) to obtain an **adjuvant** composition; and mixing the **adjuvant** composition with immunogenic substance(s) and optionally with carriers and/or excipients to obtain the **parenteral vaccine** formulation.

ACTIVITY - Immunostimulant.

MECHANISM OF ACTION - **Vaccine.**

No details of tests showing mechanism of action are given.

USE - The **adjuvant** is useful in the **parenteral vaccine** formulation which is useful for generating an immune response in a subject (a vertebrate, e.g. human) following administration of the **vaccine** formulation, (claimed).

ADVANTAGE - The **adjuvant** may create a depot of antigen resulting in a prolonged slow release over time, therefore reducing the need for booster **vaccinations.**

Dwg.0/3

FS CPI

FA AB; DCN

MC CPI: B04-A07E; B04-B04C; B05-A01B; B05-A03B; B05-B02A3; B05-B02C; B05-C04; B05-C05; B05-C08; **B14-S11**

TECH UPTX: 20020416
TECHNOLOGY FOCUS - PHARMACEUTICALS - Preferred Salt(s): The salt is an inorganic or organic salt, formed with oxides, peroxides, hydroxides, carbonates, phosphates, pyro-phosphates, hydrogenphosphates, dihydrogenphosphates, sulfates and/or silicates and their hydrates, (preferably salts formed between magnesium, calcium, barium, titanium or zirconium and oxide, peroxide, hydroxide and/or carbonate, and their hydrates).
Preferred **Adjuvant**: The formulation further comprises an additional **adjuvant** selected from saponins (sterol and triterpenoid glycosides, derived from bark of Quilaja saponiaria tree) such as Quil A, Qa-21, MF59, MPL, PLG, PLGA, calcium phosphate, and aluminum salts. The formulation further comprises carriers and/or

excipients such as diluents, buffers, suspending agents, solubilizing agents, pH-adjusting agents, dispersing agents and/or colorants. The cation of the **adjuvant** is present in amount of 0.0004-120 (preferably 0.008-6) M.

ABEX UPTX: 20020416

SPECIFIC COMPOUNDS - The use of 34 compounds as the salt are claimed, e.g. **magnesium hydroxide, magnesium carbonate** hydroxide pentahydrate, beryllium oxide (sic), **titanium dioxide**, calcium carbonate, barium hydroxide, barium peroxide, barium carbonate, barium sulfate, calcium sulfate, tricalcium silicate, calcium pyrophosphate, calcium dihyrogenphosphate, calcium sulfate dihydrate, **magnesium carbonate**, magnesium sulfate, trimagnesium phosphate, magnesium silicate, titanium disulfate, zirconium sulfate and strontium carbonate (preferably **magnesium hydroxide, magnesium carbonate** hydroxide pentahydrate and/or **titanium dioxide**).

ADMINISTRATION - The **parenteral vaccine** can be administered, e.g. by intravenous, intramuscular, intraarticular, subcutaneous, intradermal, epicutantous and intraperitoneal routes.

EXAMPLE - No relevant example is given.

L118 ANSWER 8 OF 14 WPIX (C) 2003 THOMSON DERWENT
AN 2000-532864 [48] WPIX
DNC C2000-158763
TI Composition for the delivery of a biologically interactive substance, e.g. a medicament, via a mucosal membrane of a vertebrate comprises a mucosal delivery system with an oxygen-containing metal salt.
DC B04 B07 D16
IN IPSEN, H H; ULDAL RAHBEK, J
PA (ALKA-N) ALK-ABELLO AS
CYC 91
PI WO 2000045847 A1 20000810 (200048)* EN 95p A61K047-02 <--
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW
W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
AU 2000022797 A 20000825 (200059) A61K047-02 <--
EP 1146906 A1 20011024 (200171) EN A61K047-02 <--
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI
CN 1338947 A 20020306 (200236) A61K047-02 <--
ADT WO 2000045847 A1 WO 2000-DK49 20000204; AU 2000022797 A AU 2000-22797 20000204; EP 1146906 A1 EP 2000-901497 20000204, WO 2000-DK49 20000204; CN 1338947 A CN 2000-803452 20000204
FDT AU 2000022797 A Based on WO 200045847; EP 1146906 A1 Based on WO 200045847
PRAI US 1999-118896P 19990205; DK 1999-115 19990205
IC ICM **A61K047-02**
AB WO 200045847 A UPAB: 20001001
NOVELTY - A composition for the delivery of a biologically interactive substance via a mucosal membrane of a vertebrate comprising a biologically interactive substance and a mucosal delivery system (A) with an oxygen-containing metal salt, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a **vaccine** for the delivery of an immunogenic substance via a mucosal membrane of a vertebrate comprising an immunogenic substance and (A);

(2) a formulation for the delivery of a nutritional substance via a

mucosal membrane of a vertebrate comprising a nutritional substance and (A);

(3) a formulation for the delivery of a medicament via a mucosal membrane of a vertebrate comprising a medicament and (A);

(4) a formulation for the delivery of genetic material via a mucosal membrane of a vertebrate comprising genetic material and (A);

(5) a mucosal delivery system for delivery of a biologically interactive substance via a mucosal membrane of a vertebrate comprising an oxygen-containing metal salt;

(6) delivery of a biologically interactive substance via a mucosal membrane of a vertebrate, including a human, comprising administering the new composition;

(7) generating an immune response in a vertebrate, including a human, comprising administering (1) to the vertebrate;

(8) **vaccination** or treatment of a vertebrate, including a human comprising administering the new composition or one of (1) - (4);

(9) treating, preventing or alleviating allergic reactions or infectious diseases comprising administering (1) to a vertebrate, including a human;

(10) preparing (5) using an oxygen-containing metal salt;

(11) using antibodies raised by administering (1);

(12) preparing the new composition or one of (1) - (4) by mixing (5) with a biologically interactive substance, and optionally pharmaceutically acceptable excipients; and

(13) a composition, **vaccine** or formulation obtainable by (12).

ACTIVITY - Antiallergic; antiinflammatory; immunostimulant. No biological data is given.

MECHANISM OF ACTION - **Vaccine**. No biological data is given.

USE - An oxygen-containing metal salt is used to prepare (A) which delivers a biologically interactive substance, such as an immunogenic substance, a nutritional substance, a medicament or genetic material, to a vertebrate via a mucosal membrane. A composition, **vaccine** or formulation comprising (A) and the biologically interactive substance is used for administration to allow delivery of the substance. The **vaccine** is used for the treatment, prevention or alleviation of allergic conditions or infectious diseases. The **vaccine** generates an immune response and **vaccinates** a vertebrate (all claimed).

ADVANTAGE - The biologically interactive substance is administered via a mucosal membrane of a vertebrate and avoids conventional **parenteral vaccination** which has to be performed by a physician and is often inconvenient for the patient. **Parenteral** administration can also be unpleasant.

Dwg.0/27

FS CPI

FA AB; DCN

MC CPI: B03-L; B04-A04; B04-B04C2; B04-B04C7; B04-C01A; B04-D01; B04-E01; B04-F10; B04-F11; B04-G01; B04-H02; B04-J01; B04-L01; B04-L04; B04-M01; B04-N04; B04-N0400E; B11-C04; B12-M11F; B14-A01; B14-C03; B14-G01; B14-G02A; **B14-S11**; **D05-H07**

TECH UPTX: 20001001

TECHNOLOGY FOCUS - PHARMACEUTICALS - Preferred Composition: The biologically interactive substance is an immunogenic substance, a nutritional substance, a medicament, genetic material, or analogs or derivatives of them. The immunogenic substances are natural, recombinant or modified proteins, fragments of them, antigens, allergens, allergoids, peptides, haptens, carbohydrates, optionally inactivated or attenuated bacteria or virus as well as components of them, RNA, DNA, PNA, parasites or retroviruses, parasitic material, mycoplasma, toxins, or analogs or derivatives of them. The nutritional substance is a vitamin, salt, enzyme, trace element, trace mineral, or an analog or derivative of them.

The medicament is an antibody, antibiotic, peptide, salt, hormone, hemolytic, haemostatic, enzyme inhibitor, or an analog or derivative of them. The genetic material is RNA, DNA, PNA, or an analog or derivative of them. The enzyme is urokinase, tissue plasminogen activator, coagulation factor VIII, streptokinase, or an analog or derivative of them. The cation of the oxygen-containing metal salt is Al, K, Ca, Mg, Zn, Ba, Na, Li, B, Be, Fe, Si, Co, Cu, Ni, Ag, Au, or Cr. The anion of the oxygen-containing metal salt is a sulfate, hydroxide, phosphate, nitrate, iodate, bromate, carbonate, hydrate, acetate, citrate, oxalate, tartrate, or a mixed form of these. The oxygen-containing metal salt is aluminium hydroxide, aluminium phosphate, aluminium sulfate, aluminium acetate, potassium aluminium sulfate, calcium phosphate, calcium tartrate, maalox (mixture of aluminium hydroxide and **magnesium hydroxide**), beryllium hydroxide, zinc hydroxide, zinc carbonate, barium sulfate or zinc sulfate. The composition further comprises a bioadhesive. It further comprises a pharmaceutically acceptable **adjuvant** such as interleukins (e.g. IL-1 beta, IL-2, IL-7, IL-12, and INF gamma), Adju-Phos (RTM), glucan, antigen formulation, Cholera Holotoxin, liposomes, DDE, dehydroepiandrosterone, DMPC, DMPG, DOC/Alum Complex Freund's incomplete **adjuvant**, ISCOMs (RTM), LT Oral **Adjuvant**, muramyl dipeptide, monophosphoryl lipid A, muramyl tripeptide, and phospatidylethanolamine. The mucosal membrane is nasal, buccal, sublingual or gastrointestinal.
Preferred Formulation: The medicament is a beta-lactam, a sulfa-containing preparation, an enzyme inhibitor, a hormone, a hemolytic/haemostatic, a psychoactive drug, an opiate, a barbiturate, an enzyme, or a cancer-related compound.

ABEX UPTX: 20001001

ADMINISTRATION - Dose is 0.1 - 100 (preferably 1 - 10) times as large as a **parenteral** bioequivalent dose. Administration is via oral (preferred), nasal, vaginal, sublingual, ocular, rectal, urinal, intramammal, pulmonal, otolar (via the ear), or buccal routes (claimed). The composition, **vaccine**, or formulation is administered in the form of a spray, an aerosol, a mixture, tablets (entero- or not-enterocoated), capsules (hard or soft, entero- or not-enterocoated), a suspension, a dispersion, granules, a powder, a solution, an emulsion, chewable tablets, tablets for dissolution, drops, a gel, a paste, a syrup, a cream, a lozenge (powder, granulate, tablets), an instillation fluid, a gas, a vapor, an ointment, a stick, implants (ear, eye, skin nose, rectal, or vaginal), intramammary preparations, vagitories, suppositories, or uteritories (claimed).

EXAMPLE - A composition comprising an immunogen and oxygen-containing metal salt was formed. The immunogen (allergen extract or Tetanus toxoid) was dissolved or diluted to a concentration 10 times the concentration of the final formulation. 1/10 vol immunogen solution was mixed with 7/10 vol Coca 0.0 buffer (0.25 percent sodium hydrogen carbonate and 0.5 percent sodium chloride). 2/10 vol Alhydrogel (RTM) 1.3 percent was slowly added. The preparations were stored for no more than 3 weeks. The formulations comprising oxygen-containing metal salts and T. toxoid were stored at 4 degrees Centigrade.

L118 ANSWER 9 OF 14 WPIX (C) 2003 THOMSON DERWENT
AN 2000-505101 [45] WPIX
DNN N2000-373464 DNC C2000-151561
TI New spatially aligned conjugated composition having a thioether bond linkage, useful as an immunogen or **vaccine** against virus, bacteria (e.g. rickettsiae or chlamydiae), protozoa, fungal or parasitic infectious agents.
DC B04 C03 D16 P34
IN FREY, A; NEUTRA, M R; ROBEY, F A
PA (CHIL-N) CHILDRENS MEDICAL CENT
CYC 1

PI US 6086881 A 20000711 (200045)* 27p A61K039-385 <--
ADT US 6086881 A US 1998-79374 19980515
PRAI US 1998-79374 19980515
IC ICM **A61K039-385**
ICS **A61K038-00**; A61M036-14; C07K005-00
AB US 6086881 A UPAB: 20000918
NOVELTY - A spatially aligned conjugated composition used to induce an immune response against an infectious agent, is new. The conjugated composition comprises at least one chemically modified substance, several chemically substituted metallic oxide particles, and at least one thioether bond joining the modified substance in a controlled orientation to the substituted metallic oxide particles.

DETAILED DESCRIPTION - A spatially aligned conjugated composition used to induce an immune response against an infectious agent, is new. The conjugated composition comprises at least one chemically modified substance, several chemically substituted metallic oxide particles, and at least one thioether bond joining the modified substance in a controlled orientation to the substituted metallic oxide particles.

The chemical modification provides the substance with at least one reactive entity and a fixed spatial orientation for forming a thioether bond. The substance is selected from haptens and antigens immunologically representative of the infectious agent. The chemical substitution provides the particles with at least one corresponding reactive moiety for forming a thioether bond. The metallic oxide particles have a diameter of 10-10000 nm.

An INDEPENDENT CLAIM is also included for a fluid immunogen to be administered to a subject for inducing an immune response against an infectious agent. The fluid immunogen comprises a biocompatible carrier fluid, and the spatially aligned conjugated composition.

ACTIVITY - Antibacterial; protozoacide; antifungal; antiparasitic.

MECHANISM OF ACTION - **Vaccine**. The immunogenicity of the peptomer-particle conjugate (the conjugate composition) was tested in BALB/c mice. AntiHIVMN gp120 C4 domain peptomer serum response was tested. After priming and 3 booster immunizations, the humoral immune response was about 20-fold higher. Superior immunogenicity of the peptomer-particle antigen was also observed when analyzing the cross reactivity of the final anti-C4 domain IgG responses to native gp 120. Five out of six animals immunized with peptomer-particles, and 3 out of 4 animals immunized with peptomer-particles+MDP recognized baculovirus-expressed HIVMN gp120 in the final bleed.

USE - The composition is useful as an immunogen and as a **vaccine**. The composition induces an immune response against a virus, or a bacterium. The composition especially induces an immune response against rickettsiae, chlamydiae, mycoplasms, protozoa, fungal or parasitic infectious agents (all claimed). It is also useful as a diagnostic tool in any assay involving antibodies specific for the antigen or hapten indicative of an infectious agent. The composition may be employed for its spatial orientation and structural configuration properties in order to play any role in determining or evaluating the biological activity of novel peptides, proteins, or other pharmacological agents that are ostensibly biologically active.

Dwg.0/9
FS CPI GMPI
FA AB; DCN
MC CPI: B04-C02; B04-N03; B04-N04; B05-A01B; B05-A03B; B05-B02A3; B05-B02C; **B14-S11A**; **B14-S11B**; C04-C02; C04-N03; C04-N04; C05-A01B; C05-A03B; C05-B02A3; C05-B02C; **C14-S11A**; **C14-S11B**; **D05-H07**; D05-H09
TECH UPTX: 20000918
TECHNOLOGY FOCUS - ORGANIC CHEMISTRY - Preferred Composition: The chemically modified substance comprises a polysaccharide or a proteinaceous composition.
TECHNOLOGY FOCUS - INORGANIC CHEMISTRY - Preferred Composition: The

metallic oxide particles are composed of aluminum oxide, **titanium dioxide**, zirconium dioxide, hydroxyapatite, silicon dioxide, magnesium oxide, yttrium oxide, scandium oxide, or lanthanum oxide. The metallic oxides have a diameter of 40-900, preferably 300 nm.

TECHNOLOGY FOCUS - BIOTECHNOLOGY - Preferred Immunogen: The fluid immunogen comprises a biocompatible fluid carrier selected from physiological saline, an aqueous solution containing electrolytes, or a buffered aqueous liquid. The biocompatible fluid carrier is an oil-based formulation selected from petroleum, mineral or oil, or a water-in-oil emulsion. The fluid immunogen induces an immune response against a virus, or a bacterium. The fluid immunogen also induces an immune response against rickettsiae, chlamydiae, mycoplasms, protozoa, and fungal or parasitic infectious agents.
Preparation: The composition may be chemically synthesized under controlled chemical conditions.

ABEX UPTX: 20000918
ADMINISTRATION - Administration may be systemic (e.g. **parenteral**, intravenous, intramuscular or intraperitoneal), or by localized routes, e.g. mucosal administration via the intragastric, nasal, rectal, oral or vaginal routes. No dosage given.

EXAMPLE - The peptomer of the human immunodeficiency virus (HIV) spatially aligned conjugated composition was a homopolymer of 18-mer oligopeptides comprised by the amino acid sequence: LysIleLysGlnIleIleAsnMetTrpGlnGluVal GlyLysAlaMetTyrAlaCys. The HIVMN gp120 domain peptomer aluminum oxide nanoparticles were prepared by separately synthesizing the peptomer antigen and the metallic oxide particles, and conjugating both compounds in a terminal step. Initially, the peptide monomer for the preparation of the peptomer was synthesized as C-terminal amide on an automated peptide synthesizer. To allow subsequent head-to-tail polymerization via the intended thioether linkages, an additional cysteine was placed at the carboxy terminal end of the peptide chain. At the amino terminus, a bromoacetyl moiety was introduced. Typical yields of crude N-alpha-bromoacetyl-derivatized cysteine-containing peptide were between 50-70 %. After preparative high performance liquid chromatography (HPLC), 30 % of the expected pure peptide was obtained. Autopolymerization of the N-alpha-bromoacetyl-derivatized cysteine-containing peptide was initiated by dissolving the purified peptide in aqueous buffer at slightly alkaline pH (pH 8.0). The peptomer was end-capped by completely removing the reactive groups at the head and tail of the polymer chain before it was prepared for side on conjugation by N-epsilon-bromoacetylation of the lysine side chains. Bromoacetylation of the lysines was carried out, and the randomly bromoacetylated peptomer was used for reaction with the thiol-modified particles. The thiol-modified, metallic oxide particles were prepared from plain alpha-aluminum oxide nanoparticles. To allow conjugation of the N-epsilon-bromoacetylated peptomer onto the particles via thioether linkages, the amine-modified alumina was reacted at pH 10 with a 100-fold molar excess of N-acetylhomosteinethiolactone. The formation of free thiol groups was assayed every 15 minutes with Ellmans' reagent. The thiol-derivatized aluminum oxide nanoparticles were then reacted with the N-epsilon-lysyl-bromoacetylated peptomer until no more free sulfyhydryl groups were detected in the reaction mixture. Amino acid analysis of the final conjugate revealed a 55 % coupling yield for the peptomer leading to a specific antigen load of 16 mg peptomer per g of aluminum oxide nanoparticles.

L118 ANSWER 10 OF 14 WPIX (C) 2003 THOMSON DERWENT
AN 1999-518367 [43] WPIX
DNC C1999-151281
TI Preparation of pharmaceutical compositions in the form of polymeric microparticles, useful for the preparation of tablets, capsules and packets..

DC A31 A32 A35 A96 B07
IN BRECCIANI, M; CANAL, T; CARLI, F; GAMBINI, P; BRESCIANI, M
PA (EURA-N) EURAND INT SPA; (VECT-N) VECTORPHARMA SPA; (VECT-N) VECTORPHARMA INT SPA
CYC 85
PI WO 9939692 A2 19990812 (199943)* EN 20p A61K009-00 <--
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW
W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW
AU 9929251 A 19990823 (200005) A61K009-00 <--
EP 1051158 A2 20001115 (200059) EN A61K009-16 <--
R: AT BE CH DE DK ES FI FR GB GR IE IT LI NL PT SE
BR 9907682 A 20001114 (200064) A61K009-00 <--
AU 738029 B 20010906 (200162) A61K009-00 <--
KR 2001040727 A 20010515 (200167) A61K009-00 <--
IT 1298574 B 20000112 (200175) A61K000-00 <--
EP 1051158 B1 20011205 (200203) EN A61K009-16 <--
R: AT BE CH DE DK ES FI FR GB GR IE IT LI NL PT SE
JP 2002502809 W 20020129 (200211) 25p A61K009-16 <--
DE 69900544 E 20020117 (200213) A61K009-16 <--
US 6355273 B1 20020312 (200221) A61K009-14 <--
ES 2168855 T3 20020616 (200246) A61K009-16 <--
ADT WO 9939692 A2 WO 1999-EP781 19990205; AU 9929251 A AU 1999-29251 19990205; EP 1051158 A2 EP 1999-910199 19990205, WO 1999-EP781 19990205; BR 9907682 A BR 1999-7682 19990205, WO 1999-EP781 19990205; AU 738029 B AU 1999-29251 19990205; KR 2001040727 A KR 2000-708611 20000805; IT 1298574 B IT 1998-MI233 19980206; EP 1051158 B1 EP 1999-910199 19990205, WO 1999-EP781 19990205; JP 2002502809 W WO 1999-EP781 19990205, JP 2000-530192 19990205; DE 69900544 E DE 1999-600544 19990205, EP 1999-910199 19990205, WO 1999-EP781 19990205; US 6355273 B1 US 2000-601642 20000804; ES 2168855 T3 EP 1999-910199 19990205
FDT AU 9929251 A Based on WO 9939692; EP 1051158 A2 Based on WO 9939692; BR 9907682 A Based on WO 9939692; AU 738029 B Previous Publ. AU 9929251, Based on WO 9939692; EP 1051158 B1 Based on WO 9939692; JP 2002502809 W Based on WO 9939692; DE 69900544 E Based on EP 1051158, Based on WO 9939692; ES 2168855 T3 Based on EP 1051158
PRAI IT 1998-MI233 19980206
IC ICM **A61K000-00; A61K009-00; A61K009-14; A61K009-16**
ICS **A61K047-02; A61K047-14; A61K047-30; A61K047-36; A61K047-44**
AB WO 9939692 A UPAB: 20011203
NOVELTY - Pharmaceutical compositions are prepared in the form of polymeric microparticles.

DETAILED DESCRIPTION - Preparation of pharmaceutical compositions in the form of polymeric microparticles comprises:

(a) preparation of a homogeneous mixture of substances in powder form to which a liquid to pasty consistence is added;

(b) the extrusion of the mixture through a perforated mesh to obtain cylindrical filaments;

(c) the spheronization of the filaments to obtain microparticles in spherical form;

(d) drying of the microparticles; and

(e) optional deposition of drug on the surface of the microparticles.

The mixture of substances in powder form comprises one or more cross-linked amphiphilic polymers and optionally one or more drugs, excipients, a bioadhesive substance and/or a substance having high density.

USE - The compositions are useful for the preparation of tablets, capsules and packets. The drugs may be drugs acting on the central nervous

system and on the peripheral nervous system, cardiovasculars, hypotensives, diuretics, anti-inflammatories, analgesics, antifebriles, antiasthmatics, bronchodilatators, antitussis, mucolytics, antibiotics, chemotherapeutic agents, antivirals, hormones, antineoplastics, immunosuppressants, immunostimulants, peptides, polypeptides, proteins and **vaccines.**

Dwg.0/1

FS CPI

FA AB; DCN

MC CPI: A11-A04; A11-B07B; A12-S09; A12-V01; B04-C01; B04-N02; B05-A01B; B10-C04D; B11-C09; B12-M11B; B12-M11C; B12-M11D; B14-A01; B14-A02; B14-C01; B14-C03; B14-C04; B14-D01; B14-F01; B14-F02; B14-F02B; B14-G01; B14-G02; B14-J01; B14-K01A; B14-K01B; B14-K01C; B14-K01D; B14-K01E; B14-N08; **B14-S11**

TECH UPTX: 19991020

TECHNOLOGY FOCUS - PHARMACEUTICALS - Preferred components: The cross-linked amphipilic polymers are selected from cross-linked polyvinyl pyrrolidone, sodium carboxymethyl cellulose, sodium glycolate starch and dextrans. The mixture in powder form consists of a cross-linked amphiphilic polymer and of a drug, obtained by high energy comilling or by loading by solvent. The bioadhesive substance is selected from alginates, scleroglucans, chitosans, xanthans and silicone gel. The high density substance is selected from aluminium oxide, **titanium dioxide**, iron oxide, calcium carbonate and barium sulfate. The liquid is selected from water, aqueous solutions, organic solvents and their mixtures, saturated and unsaturated natural oils, semisynthetic and synthetic mono-, di- and triglycerides, liquid waxes, silicone oils, polyethylene glycols, polyglycolic glycerides and polyglycols.

Preferred drugs: The drugs are selected from drugs acting on the central nervous system and on the peripheral nervous system, cardiovasculars, hypotensives, diuretics, anti-inflammatories, analgesics, antifebriles, antiasthmatics, bronchodilatators, antitussis, mucolytics, antibiotics, chemotherapeutic agents, antivirals, hormones, antineoplastics, immunosuppressants, immunostimulants, peptides, polypeptides, proteins and **vaccines.**

Preferred process: The drugs are uniformly distributed inside the microparticles or deposited on the surface of the microparticles. When the drug is distributed inside the microparticles, it is present in an amount of 0.1-95% by weight with respect to the microparticles.

Preferred composition: The amount of liquid is 1-80% by weight with respect to the mixture in powder form. The compositions comprise one or more cross-linked amphiphilic polymers, one or more drugs and optionally a bioadhesive substance and/or a high density substance, the microparticles having spherical or almost-spherical form with a diameter of 100 mum- 3 mm.

ABEX UPTX: 19991020

EXAMPLE - An extruder was fed with Explotab in the form of powder with granulometry lower than 140 mesh and with demineralized water and extrusion was carried out to give extrusion filaments. The filaments were treated in a spheronizator at a velocity of 800 rpm for 3 minutes to give a product in the form of microparticles which were dried in a stove at 70 degreesC for 12 hours.

L118 ANSWER 11 OF 14 WPIX (C) 2003 THOMSON DERWENT

AN 1998-437043 [37] WPIX

CR 1991-295351 [40]; 1995-199683 [26]; 1996-019737 [02]; 1997-393337 [36]; 1998-031704 [03]; 1998-347245 [30]; 2001-396353 [42]; 2003-101718 [09]

DNC C1998-132804

TI New burst-free, sustained, programmable release composition(s) - containing an active material in a blend of uncapped and end-capped co polymer, preferably a poly (DL-lactide-co glycolide).

DC A96 B04 B05 B07 D16 P73

IN BOEDEKER, E C; FRIDEN, P; JACOB, E; JEYANTHI, R; MCQUEEN, C E; REID, R H;

ROBERTS, F D; SETTERSTROM, J A; TICE, T R; VAN HAMONT, J E; BROWN, W; CASSELS, F; JARBOE, D L; THIES, C

PA (USSA) US SEC OF ARMY

CYC 79

PI WO 9832427 A1 19980730 (199837)* EN 422p A61K009-52 <--
RW: AT BE CH DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW
W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH HU IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW
AU 9863175 A 19980818 (199851) A61K009-52 <--
US 6309669 B1 20011030 (200172) A61K009-52 <--
US 6410056 B1 20020625 (200246)# A61K009-50 <--

ADT WO 9832427 A1 WO 1998-US1556 19980127; AU 9863175 A AU 1998-63175 19980127; US 6309669 B1 Cont of US 1984-590308 19840306, CIP of US 1984-590308 19840316, CIP of US 1992-867301 19920410, CIP of US 1995-446148 19950522, CIP of US 1995-446149 19950522, CIP of US 1996-590973 19960124, US 1997-789734 19970127; US 6410056 B1 CIP of US 1984-590308 19840316, CIP of US 1990-493597 19900315, CIP of US 1994-209350 19940107, US 1995-446148 19950522

FDT AU 9863175 A Based on WO 9832427; US 6309669 B1 CIP of US 5417986

PRAI US 1997-789734 19970127; US 1984-590308 19840306; US 1992-867301 19920410; US 1995-446148 19950522; US 1995-446149 19950522; US 1996-590973 19960124

IC ICM **A61K009-50**; **A61K009-52**
ICS **A61K047-30**; B32B005-16

AB WO 9832427 A UPAB: 20030206
A composition is claimed for the burst-free, sustained, programmable release of active material(s) over a period from 1-100 days, comprising: (a) an active material; and (b) a carrier which may contain pharmaceutically-acceptable **adjuvant**, comprised of a blend of uncapped and end-capped biodegradable-biocompatible copolymer.

Also claimed are: (1) a process for preparing controlled release compositions characterised by burst-free, sustained, programmable release of biologically active agents, comprising: (a) dissolving biodegradable poly(lactide/glycolide), in uncapped or end-capped form in methylene chloride, and dissolving a biologically active agent or active core in water; (b) adding the aqueous layer to the polymer solution and emulsifying to provide an inner water-in-oil (w/o) emulsion; (c) stabilising the w/o emulsion in a solvent-saturated aqueous phase containing a oil-in-water (o/w) emulsifier; (d) adding the w/o emulsion to an external aqueous layer containing o/w emulsifier to form a ternary emulsion; and (e) stirring the resulting water-in-oil-in-water (w/o/w) emulsion to remove the solvent, and rinsing hardened microcapsules with water and lyophilising the hardened microcapsules; (2) a method for the protection against infection of a mammal by pathogenic organisms comprising administering orally to the mammal an immunogenic amount of an immunostimulating composition consisting of an antigenic synthetic peptide encapsulated within a poly(lactide/galactide) matrix; (3) a **vaccine** for the immunisation of a mammal against infection by pathogenic organisms consisting of an antigen in an amount of 0.1-1% encapsulated within a biodegradable-biocompatible polymeric poly(DL-lactide-co-glycolide) matrix where the polymer is end-capped or a blend of uncapped and end-capped polymers; and (4) an immunostimulating composition comprising encapsulating-microspheres, which may contain an **adjuvant**, where the microspheres having a diameter of 1 nm to 10 microns are comprised of: (a) a biodegradable-biocompatible poly (DL-lactide-co-glycolide) as the bulk matrix, where the copolymer (lactide to glycolide L/G) ratio for uncapped and end-capped polymer is 0/100 to 1/99; and (b) an immunogenic substance comprising a bacteria, virus, fungus, parasite, or derivative, that serves to elicit the production of antibodies in animal subjects.

USE - The biocompatible and biodegradable microspheres can provide programmable sustained release of biologically active agents, including polypeptides over a period of up to 100 days in an aqueous physiological environment with little or no burst release. They can be used for the delivery of e.g. insulins, AZT, diethyl silbestrol, 17-beta-oestradiol, oestron, ethinyl estradiol, mestranol, norethindrone, norgestryl, ethynodiol diacetate, lynoestrenol, medroxyprogesterone acetate, dimethisterone, megestrol acetate, chlormadinine acetate, norgestimate, norethisterone, ethisterone, melentate, norgestimate, norethisterone, ethisterone, melentate, melengestrol, norethynodrel, nonylphenoxypolyoxyethylene glycol, benzethonium chloride, chlorindanol, aluminium hydroxide, calcium carbonate, **magnesium carbonate**, sodium carbonate, chloropromaquine HCl, clozapine, mesoridazine, metiapine, reserpine, thioridazine, chlordiazepoxide, diazepam, meprobamate, temazepam, codeine, phenobarbital, sodium pentobarbital, sodium secobarbital, testosterone, testosterone propionate, sulphonamides, 4-aminoquinolines, 8-aminoquinolines, pyrimethamine, mazindol. phentermine, L-dopa, atropine, methscopolamine bromide, dextromethorphan, noscapine, Rauwolfia alkaloids, nitroglycerin, organic nitrites, pentaerythriotetranitrate, potassium chloride, ergotamine with and without caffeine, hydrogenated ergot alkaloids, dihydroergocristine methanesulphate, dihydrooergocornine methanesulphonate, dihydroergokroyptine methanesulphate, atropine sulphate, Belladonna, hyoscine hydrobromide, dihydrocodienone, meperidine, morphine, salicylates, asprin, acetaminophen, d-propoxyphene, ceflacor, cefuroxime, chloramphenical, gentamycin, Kanamycin A, Kanamycin B, ampicillin, amoxicillin, streptomycin A, antimycin A, chloropamtheniol, metromidazole, oxytetracycline, penicillin G, minocycline, ciprofloxacin, ofoxacin, clarithromycin, frythromycin (sic), gentamicin, amikacin, tobramycin, kanamycin, ampicillin, polymyxin-B, amphotericin-B, aztrofonam, chloramphenicol, fusidans, lincosamides, metronidazole, nitro-furantion, imipenem/cilastin, quinolones, rifampin, polyenes, sulphonamides, trimethoprim, vancomycin, teicoplanin, imidazoles, mephenytoin, phenobarbital, trimethadione, triethylperazine, chlorophinazine, dimenhydrinate, diphenhydramine, perphenazine, tripelennamine, hydrocortisone, prednisolone, prednisone, allopurinol, indomethacin, phenylbutazone, prostaglandin, thiotepa, chloramucil, cyclophosphamide, melphalan, nitrogen mustard, methotrexate, aztreonam, and refampin.

Dwg.0/54

FS CPI GMPI

FA AB; DCN

MC CPI: A05-E02; A10-E01; A12-V01; B02-P03; B04-B04C; B04-C03D; B04-F09; B04-F10; B04-F11; B12-M10A; B12-M11E; B14-G01; **B14-S11**; **D05-H07**

L118 ANSWER 12 OF 14 WPIX (C) 2003 THOMSON DERWENT

AN 1993-182249 [22] WPIX

CR 1992-024125 [03]

DNC C1993-080684

TI Pasteurella multocida typed strain 4677 bacterin **vaccine** - contain bordetella bronchiseptica and/or erysipelothrix rhusiopathiae bacterins used to inoculate animals against atropic rhinitis and erysipelas.

DC B04 C06 D16

IN FRANTZ, J C; KEMMY, R J; ROBERTS, D S; SWEARINGIN, L A

PA (PFIZ) PFIZER INC; (SMIK) SMITHKLINE BEECHAM CORP

CYC 20

PI WO 9309809 A1 19930527 (199322)* EN 66p A61K039-00 <--
RW: AT BE CH DE DK ES FR GB GR IE IT LU MC NL SE
W: AU CA JP US

AU 9331430 A 19930615 (199340) A61K039-00 <--

EP 614371 A1 19940914 (199435) EN A61K039-00 <--
R: AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL SE

JP 07501334 W 19950209 (199515) A61K039-102 <--
EP 614371 A4 19950607 (199616) A61K039-00 <--
AU 669681 B 19960620 (199632) A61K039-102 <--
US 5695769 A 19971209 (199804) 14p A61K039-102 <--
JP 3270473 B2 20020402 (200225) 19p A61K039-102 <--

ADT WO 9309809 A1 WO 1992-US10008 19921113; AU 9331430 A AU 1993-31430 19921113; EP 614371 A1 EP 1992-925340 19921113, WO 1992-US10008 19921113; JP 07501334 W WO 1992-US10008 19921113, JP 1993-509531 19921113; EP 614371 A4 EP 1992-925340 ; AU 669681 B AU 1993-31430 19921113; US 5695769 A CIP of US 1990-537454 19900613, Cont of US 1991-792490 19911115, WO 1992-US10008 19921113, US 1994-244052 19940711; JP 3270473 B2 WO 1992-US10008 19921113, JP 1993-509531 19921113

FDT AU 9331430 A Based on WO 9309809; EP 614371 A1 Based on WO 9309809; JP 07501334 W Based on WO 9309809; AU 669681 B Previous Publ. AU 9331430, Based on WO 9309809; US 5695769 A CIP of US 5536496, Based on WO 9309809; JP 3270473 B2 Previous Publ. JP 07501334, Based on WO 9309809

PRAI US 1991-792490 19911115; US 1990-537454 19900613; US 1994-244052 19940711

REP 3.Jnl.Ref; 1.Jnl.Ref; WO 9119419

IC **A61K039-02**
ICM **A61K039-00; A61K039-102**
ICS **A61K039-02; A61K039-10; A61K039-116; A61P031-04**

AB WO 9309809 A UPAB: 20020418

Vaccine compsn. comprises a Pasteurella multocida type D strain 4677 bacterin with a cell-bound toxoid, which upon admin. neutralised antibody to the toxin.

Also claimed are: (1) a P.multocida type D strain 4677 bacterin with a cell-bound toxoid, which on admin. to an animal induced the prodn. of neutralising antitoxin; (2) a **vaccine** compsn. comprising the bacterin of (1) and a P.multocida soluble free toxoid; and (3) a **vaccine** compsn. comprising the components of (2) and a Bordetella bronchiseptica bacterin and an Arysipelothrix rhusiopathiae bacterin.

The **vaccine** is pref. produced by treating P. multocida in the exponential phase of growth with formaldehyde to inactivate the intracellular toxin. The **vaccine** dosage comprises 0.5-3 ml of a sterile suspension of an immunogenic amt. of the P. multocida bacterin with cell-bound toxoid, esp. 150 relative toxoid units/ml free toxoid. The **vaccine** also comprises an **adjuvant**, pref. Al(OH)4, a saponin, **Mg(OH)2**, Al phosphate, Mg phosphate or a Ca cpd..

USE/ADVANTAGE - The **vaccines** are used to **vaccinate** animals against atropic rhinitis and erysipelas. The **vaccine** is storage stable at 4 deg.C for at least 24 hours. Free and cell-bound toxoids have been seen to act synergistically in a single prepn.. Other **vaccine** components include E. coli, pneumonic P. multocida, Streptococcus suis, Actinobacillus pleuropneumoniae, Clostridium perfringens C and D toxoids, pseudorabies virus (modified live and/or killed virus), rotavirus **vaccine** (modified live), coronavirus **vaccine** (modified live virus) and M. hyopneumoniae. Swine are pref. **vaccinated** at 1 week of age, with a booster dose at weaning age. Pregnant dams are given 2 doses, with the last given 2 weeks before farrowing. Booster doses are given prior to each subsequent farrowindy

Dwg.0/0

FS CPI
FA AB
MC CPI: **B02-V02; C02-V02; D05-H07**

ABEQ US 5695769 A UPAB: 19980126

Vaccine compsn. comprises a Pasteurella multocida type D strain 4677 bacterin with a cell-bound toxoid, which upon admin. neutralised antibody to the toxin.

Also claimed are: (1) a P.multocida type D strain 4677 bacterin with

a cell-bound toxoid, which on admin. to an animal induced the prodn. of neutralising antitoxin; (2) a **vaccine** compsn. comprising the bacterin of (1) and a P.multocida soluble free toxoid; and (3) a **vaccine** compsn. comprising the components of (2) and a Bordetella bronchiseptica bacterin and an Arysipelothrix rhusiopathiae bacterin.

The **vaccine** is pref. produced by treating P. multocida in the exponential phase of growth with formaldehyde to inactivate the intracellular toxin. The **vaccine** dosage comprises 0.5-3 ml of a sterile suspension of an immunogenic amt. of the P. multocida bacterin with cell-bound toxoid, esp. 150 relative toxoid units/ml free toxoid. The **vaccine** also comprises an **adjuvant**, pref. Al(OH)4, a saponin, **Mg(OH)2**, Al phosphate, Mg phosphate or a Ca cpd..

USE/ADVANTAGE - The **vaccines** are used to **vaccinate** animals against atropic rhinitis and erysipelas. The **vaccine** is storage stable at 4 deg.C for at least 24 hours. Free and cell-bound toxoids have been seen to act synergistically in a single prepn.. Other **vaccine** components include E. coli, pneumonic P. multocida, Streptococcus suis, Actinobacillus pleuropneumoniae, Clostridium perfringens C and D toxoids, pseudorabies virus (modified live and/or killed virus), rotavirus **vaccine** (modified live), coronavirus **vaccine** (modified live virus) and M. hyopneumoniae. Swine are pref. **vaccinated** at 1 week of age, with a booster dose at weaning age. Pregnant dams are given 2 doses, with the last given 2 weeks before farrowing. Booster doses are given prior to each subsequent farrowindy

Dwg.0/0

L118 ANSWER 13 OF 14 WPIX (C) 2003 THOMSON DERWENT
AN 1992-056681 [07] WPIX
DNC C1992-025564
TI Controlled-density carriers for active substances - comprising high- and/or low-density particles and binder.
DC A96 A97 B07 C07 D13 D15 D16
IN BOG-HANSEN, T C; LIHME, A O F; NIELSEN, C S; NEILSEN, C S; LIHME, A; B G-HANSEN, T C; NIELSEN, C; LIHME, A O; BOEG-HANSEN, T C; BOGHANSEN, T C; BOG HANSEN, T C
PA (KEME-N) KEM ENTEC AS; (UPFR-N) UPFRONT CHROMOTOGRAPHY AS; (UPFR-N) UPFRONT CHROMATOGRAPHY AS; (KEME-N) KEM-EN-TEC AS; (KEME-N) KEMEN-TEC A/S
CYC 36
PI WO 9200799 A 19920123 (199207)*
RW: AT BE CH DE DK ES FR GB GR IT LU NL OA SE
W: AT AU BB BG BR CA CH CS DE DK ES FI GB HU JP KP KR LK LU MC MG MW NL NO PL RO SD SE SU US

AU 9182195	A	19920204	(199220)		B01J002-00
EP 538350	A1	19930428	(199317)	EN 98p	B01J002-00
R: AT BE CH DE DK ES FR GB GR IT LI LU NL SE					
EP 607998	A2	19940727	(199429)	EN	G01N030-48
R: AT BE CH DE DK ES FR GB GR IT LI LU NL SE					
JP 06505911	W	19940707	(199431)		B01J013-02
HU 67261	T	19950328	(199518)		B01J002-00
AU 659090	B	19950511	(199527)		B01J002-00
EP 607998	A3	19940831	(199531)		
EP 722771	A1	19960724	(199634)	EN	B01J008-20
R: AT BE CH DE DK ES FR GB GR IT LI LU NL SE					
EP 607998	B1	19960918	(199642)	EN 29p	G01N030-48
R: AT BE CH DE DK ES FR GB GR IT LI LU NL SE					
EP 538350	B1	19960925	(199643)	EN 39p	B01J002-00
R: AT BE CH DE DK ES FR GB GR IT LI LU NL SE					
DE 69122271	E	19961024	(199648)		G01N030-48
DE 69122393	E	19961031	(199649)		B01J002-00
ES 2094572	T3	19970116	(199710)		G01N030-48
ES 2095944	T3	19970301	(199716)		B01J002-00

US 5866006 A 19990202 (199912) B01D015-08
US 5935442 A 19990810 (199938) B01D015-08
EP 722771 B1 19990929 (199945) EN B01J008-20
R: AT BE CH DE DK ES FR GB GR IT LI LU NL SE
DE 69131670 E 19991104 (199953) B01J008-20
EP 976447 A1 20000202 (200011) EN B01J008-32
R: AT BE CH DE DK ES FR GB GR IT LI LU NL SE
EP 978311 A1 20000209 (200012) EN B01J008-20
R: AT BE CH DE DK ES FR GB GR IT LI LU NL SE
US 6043067 A 20000328 (200023) C12N011-00
CA 2086752 C 20010116 (200107) EN B01J032-00
JP 3168206 B2 20010521 (200130) 29p G01N030-58
CA 2259061 C 20011204 (200203) EN B01D015-02
CA 2259062 C 20021112 (200302) EN B01J008-20

ADT AU 9182195 A AU 1991-82195 19910708, WO 1991-DK195 19910708; EP 538350 A1 EP 1991-913007 19910708, WO 1991-DK195 19910708; EP 607998 A2 Related to EP 1991-913007 19910708, EP 1994-101585 19910708; JP 06505911 W JP 1991-512733 19910708, WO 1991-DK195 19910708; HU 67261 T WO 1991-DK195 19910708, HU 1993-33 19910708; AU 659090 B AU 1991-82195 19910708; EP 607998 A3 EP 1994-101585 19910708; EP 722771 A1 Div ex EP 1991-913007 19910708, EP 1996-103637 19910708; EP 607998 B1 Div ex EP 1991-913007 19910708, EP 1994-101585 19910708; EP 538350 B1 EP 1991-913007 19910708, WO 1991-DK195 19910708; DE 69122271 E DE 1991-622271 19910708, EP 1994-101585 19910708; DE 69122393 E DE 1991-622393 19910708, EP 1991-913007 19910708, WO 1991-DK195 19910708; ES 2094572 T3 EP 1994-101585 19910708; ES 2095944 T3 EP 1991-913007 19910708; US 5866006 A Div ex WO 1991-DK195 19910708, Div ex US 1993-971860 19930308, US 1998-4316 19980108; US 5935442 A WO 1991-DK195 19910708, US 1993-971860 19930308; EP 722771 B1 Div ex EP 1991-913007 19910708, EP 1996-103637 19910708; DE 69131670 E DE 1991-631670 19910708, EP 1996-103637 19910708; EP 976447 A1 Div ex EP 1996-103637 19910708, EP 1999-118668 19910708; EP 978311 A1 Div ex EP 1991-913007 19910708, Div ex EP 1996-103637 19910708, EP 1999-105046 19910708, Related to EP 1999-118668 19910708; US 6043067 A Div ex WO 1991-DK195 19910708, Div ex US 1993-971860 19930308, US 1998-3830 19980108; CA 2086752 C CA 1991-2086752 19910708, WO 1991-DK195 19910708; JP 3168206 B2 JP 1991-512733 19910708, WO 1991-DK195 19910708; CA 2259061 C Div ex CA 1991-2086752 19910708, CA 1991-2259061 19910708; CA 2259062 C Div ex CA 1991-2086752 19910708, CA 1991-2259062 19910708

FDT AU 9182195 A Based on WO 9200799; EP 538350 A1 Based on WO 9200799; JP 06505911 W Based on WO 9200799; HU 67261 T Based on WO 9200799; AU 659090 B Previous Publ. AU 9182195, Based on WO 9200799; EP 607998 A3 Related to EP 538350; EP 538350 B1 Based on WO 9200799; DE 69122271 E Based on EP 607998; DE 69122393 E Based on EP 538350, Based on WO 9200799; ES 2094572 T3 Based on EP 607998; ES 2095944 T3 Based on EP 538350; US 5935442 A Based on WO 9200799; EP 722771 B1 Div ex EP 538350; DE 69131670 E Based on EP 722771; EP 976447 A1 Div ex EP 722771; EP 978311 A1 Div ex EP 538350, Div ex EP 722771, Related to EP 976447; CA 2086752 C Based on WO 9200799; JP 3168206 B2 Previous Publ. JP 06505911, Based on WO 9200799

PRAI DK 1990-1650 19900709

REP 2.Jnl.Ref; EP 175568; EP 21267; EP 25309; EP 74221; EP 7783; EP 88404; JP 01047320; JP 59062339; SE 397669; WO 8102844; WO 8707851; WO 9014157; No-SR.Pub; US 4143201; DE 2411828; DE 2452936; US 2662091; US 3985806; WO 8505561

IC B01D039-00; B01J002-30; B01J008-10; B01J008-38; B01J013-00; B01J020-00; C02F001-28; C09K003-32

ICM B01D015-02; B01D015-08; B01J002-00; B01J008-20; B01J008-32; B01J013-02; B01J032-00; C12N011-00; G01N030-48; G01N030-58

ICS **A61K009-16**; **A61K047-30**; B01D015-00; B01D015-04; B01D039-00; B01D039-04; B01J002-16; B01J002-30; B01J008-00; B01J008-08; B01J008-10; B01J008-18; B01J008-22; B01J008-24; B01J008-38; B01J013-00; B01J019-00; B01J020-00; B01J020-26; B01J020-28; B01J020-32; C02F001-00; C02F001-28; C07K001-04; C07K001-16; C09K003-32; C12M001-40; C12N011-02; G01N030-02

ICA B01D039-14; B01J002-08; C07B063-00
AB WO 9200799 A UPAB: 19931006
Compsns. for use as carriers for an active substance in a fluid and having controlled density relative to the fluid comprise high- and/or low density particles and a binder.
Examples describe: (a) hollow glass beads (HGB) bound with agarose, polyacrylamide, gelatin, agar-gelatin or chitosan; (b) HGB bound with gelatin contg. immobilised horseradish peroxidase (e.g. for waste water treatment) or yeast cells; (c) agarose-bound HGB activated with divinyl sulphone and mercaptoethanol for separating immunoglobulins from blood; (d) prods. of type (c) coupled to rabbit Ig for immunosorption of anti-Ig antibodies; (e) HGB bound with crosslinked acrylamide/acrylic acid copolymer for use as a cation exchanger, e.g. for treating waste water from the fish industry; (f) prods. of type (c) coupled to glucose oxidase; (g) prods. of type (c) coupled to N-acetylglucosamine for sepn. of wheat germ agglutinin; (h) solid glass beads bound with crosslinked acrylamide/acrylic acid copolymer or gelatin.
USE - The compsns. may be used 'as a solid phase matrix, carrier, or substrate material in a fluid bed reactor; or in a batch reactor; as a carrier of substances for sustained release; as a food material, medical, and **vaccine** for fish, or other animals living in water; as a material for treating waste water and m polluted waters; and as a material for treating polluted water such as oil polluted sea water' (sic).
0/7
FS CPI
FA AB; DCN
MC CPI: A12-V01; B04-B02C2; B04-B04A6; B04-B04C6; B04-C02D; B04-C02E3; B04-C03B; B04-D02; B07-A02; B10-A10; B10-E03; B12-M10A; C04-B02C2; C04-B04A6; C04-B04C6; C04-C02D; C04-C02E3; C04-C03B; C04-D02; C07-A02; C10-A10; C10-E03; C12-M10A; D03-G; D03-H01; D04-A01; D05-A01; D05-A01B1; D05-A03A; **D05-H07**; D05-H10
ABEQ EP 538350 A UPAB: 19931025
Compsns. for use as carriers for an active substance in a fluid and having controlled density relative to the fluid comprise high- and/or low density particles and a binder.
Examples describe: (a) hollow glass beads (HGB) bound with agarose, polyacrylamide, gelatin, agar-gelatin or chitosan; (b) HGB activated with divinyl sulphone and mercaptoethanol for sepg. immunoglobulins from blood; (d) prods. of type (c) coupled to rabbit Ig for immunosorption of anti-Ig antibodies; (e) HGB bound with crosslinked acrylamide/acrylic acid copolymer for use as a cation exchanger, e.g. for treating waste water from the fish industry; (f) prods. of type (c) coupled to glucose oxidase; (g) prods. of type (c) coupled to N-acetylglucosamine for sepn. of wheat germ agglutinin; (h) solid glass beads bound with crosslinked acrylamide/acrylic acid copolymer or gelatin.
USE - Useful as a solid phase matrix, carrier, or substrate material in a fluid bed reactor; or in a batch reactor; as a carrier of substances for sustained release; as a food material, medical, and **vaccine** for fish, or other animals living in water; as a material for treating waste water and polluted waters; and as a material for treating polluted water such as 'oil polluted sea water' (sic).
Dwg.0/7
ABEQ EP 607998 B UPAB: 19961021
Chromatographic adsorbent particles having covalently bound at least one active substance for binding molecules in liq. chromatographic fluid bed process and controlled particle size, is characterised in (a) that porous composite material consists of conglomerate having controlled relative density and comprising: (i) at least two density-controlling basic particles of amorphous silica, quartz, or glass having low density particles; and (ii) matrix formed by consolidating at least one conglomerating agent selected from natural and synthetic polysaccharides and other carbohydrate based polymers and having at least one active substance is covalently bound. Density and size range are selected to

provide desired floatation/sedimentation properties of adsorbent particles in liquid.
Dwg.0/6

ABEQ EP 538350 B UPAB: 19961025
Chromatographic absorbent particles having covalently bound at least one active substance for binding molecules in a liquid chromatographic fluid bed process; said adsorbent particles being constituted by a porous composite material having pores allowing access to the interior of the composite material of said molecules; characterized in (a) that the porous composite material consists of a conglomerate having controlled density; said conglomerate consisting of: (i) at least two density controlling particles selected from the group consisting of low density particles having a density providing floatation and high density particles having a density providing sedimentation of the conglomerate in said liquid; and (ii) a matrix formed by consolidating at least one conglomerating agent selected from the group consisting of natural and synthetic organic monomers and polymers; said at least two density controlling particles being dispersed in said matrix; (b) that the size range of the adsorbent particles is controlled; (c) that said density and said size range are selected to provide desired floatation/sedimentation properties of said adsorbent particles in the liquid in said fluid bed process; and (d) that the at least one active substance is covalently bound to said matrix; with the proviso that when said at least two density controlling particles are of amorphous silica, quartz, or glass, than said conglomerating agent does not consist of natural and synthetic polysaccharides and other carbohydrate based polymers.
Dwg.0/7

L118 ANSWER 14 OF 14 WPIX (C) 2003 THOMSON DERWENT
AN 1984-056355 [10] WPIX
DNC C1984-023932
TI Prodn. of **vaccine** for treating tick paralysis - by detoxification of purified tick salivary gland extract.
DC B04 C03
IN STONE, B
PA (CSIR) COMMONWEALTH SCI & IND RES ORG
CYC 1
PI AU 8316459 A 19840119 (198410)* 23p
ADT AU 8316459 A AU 1983-16459 19830630
PRAI AU 1982-4813 19820712; AU 1983-16459 19830630
IC **A61K035-64; A61K039-00**; C07G007-00
AB AU 8316459 A UPAB: 19930925
The prodn. comprises (1) obtd. a tick salivary gland extract; (2) purifn. of the extract by centrifugation or filtration to give a purified fraction; (3) addn. of a detoxifying agent (I) to the fraction (opt. after purification or modification); and (4) addn. of an **adjuvant** (II).
Also claimed are prodn. of an antiserum comprises **injection** into an animal of the purified fraction obtd. in step (2), opt. after further purification or modification, and the antiserum is subsequently recovered, and prodn. of a toxin comprises treatment of the purified fraction obtd. in step (2), opt. after further purification or modification, with a gel contg. Al(OH)3 or **Mg(OH)2** to bind non-toxic material, and the toxin fraction is sepd.
The **vaccines** protect domestic pets and livestock against paralysis by ticks, esp. by Ixodes holocyclus. The antitoxin has high potency and may be used to treat tick paralysis in humans.
0/0
FS CPI
FA AB
MC CPI: B02-V; C02-V

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=> d his

     (FILE 'HOME' ENTERED AT 15:13:22 ON 24 APR 2003)
               SET COST OFF

     FILE 'HCAPLUS' ENTERED AT 15:13:33 ON 24 APR 2003
               E DK2000-1194/AP,PRN
L1             1 S E4

     FILE 'REGISTRY' ENTERED AT 15:18:24 ON 24 APR 2003
L2             1 S 1309-42-8
L3             1 S 13463-67-7
L4             1 S 61042-72-6
L5           187 S 463-79-6/CRN AND MG/ELS
L6            31 S L5 AND H2O
L7            11 S L6 AND 3/NC
L8             8 S L7 NOT MNS/CI

     FILE 'HCAPLUS' ENTERED AT 15:19:55 ON 24 APR 2003
L9         11603 S L2
L10        17733 S (MG OR MAGNESIUM)()HYDROXIDE OR MGOH2 OR MG OH 2
L11       112281 S L3
L12       197480 S (TI OR TITANIUM)()(DIOXIDE OR OXIDE) OR TIO2 OR TITANIA
L13           14 S L4
L14          125 S L8
L15            7 S (MG OR MAGNESIUM)()CARBONATE()(5H2O OR PENTAHYDRATE)

     FILE 'REGISTRY' ENTERED AT 15:23:37 ON 24 APR 2003
L16            3 S L5 AND 2/NC NOT (IDS OR MNS)/CI

     FILE 'HCAPLUS' ENTERED AT 15:23:57 ON 24 APR 2003
L17         7182 S L16
L18        15662 S (MG OR MAGNESIUM)()CARBONATE OR CARBONIC ACID (S) MAGNESIUM S
L19       234093 S L9-L15,L17-L18
L20            1 S L1 AND L19
               E SONI N/AU
L21           57 S E3,E5,E11
               E KRISTENSEN/AU
               E KRISTENSEN N/AU
L22            4 S E3,E8,E12
               E RAHBEK J/AU
L23            2 S E4
               E ULDAL/AU
               E AASMUL OLSEN/AU
L24           23 S E4,E5
               E LUND L/AU
L25          107 S E3-E13
               E LUND LISE/AU
L26            3 S E3
               E ALK/PA,CS
L27           29 S E5-E20
L28           10 S E26,E30-E36
L29            2 S E37,E38
               E ABELLO/PA,CS
L30            1 S L19 AND L21-L29
L31            1 S L20,L30
               E VACCINE/CT
L32           88 S E24
L33        32651 S E4-E29
               E E4+ALL
L34        32651 S E2
               E DRUG DELIVER/CT
L35         8768 S E14,E15,E77-E84,E92,E96,E143-E145,E172
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                E E6+ALL
L36         48056 S E4
L37          4251 S E29,E48,E49,E108-E115,E124,E128,E172-E174,E201,E276-E279,E298
L38             1 S L19 AND L32
L39            29 S L19 AND L33
L40            29 S L19 AND L34
L41            47 S L19 AND L35
L42            10 S L19 AND L37
L43           500 S L19 AND L36
L44            29 S L38-L43 AND VACCIN?
L45            27 S L19 AND PARENTER?
L46            15 S L45 AND L38-L43
L47            53 S L44-L46
                E ADJUVANT/CT
L48           561 S E6,E8,E10
                E E6+ALL
L49          5058 S E2
L50            14 S L19 AND L48-L49
L51           108 S L19 AND ADJUVANT
L52            12 S L50,L51 AND L47
L53            30 S L47,L51 AND VACCIN?
L54            11 S L52 AND L53
L55            19 S L53 NOT L54
                SEL DN AN 1 6 16
L56             3 S L55 AND E1-E9
L57            14 S L1,L31,L54,L56
L58            44 S L47,L50,L52-L56 NOT L57
L59            12 S L58 AND (CPLA2 OR LIQUID COMPOSITION OR IMMUNE RESPONSE OR TA
                SEL DN AN 1 12
L60             2 S L59 AND E10-E13
L61            16 S L57,L60

     FILE 'REGISTRY' ENTERED AT 16:00:31 ON 24 APR 2003
L62             3 S 66594-14-7 OR 141256-04-4 OR 172889-84-8
                E MPL/CN
L63             1 S E3
                E PLG/CN
L64             2 S E3
L65             1 S L64 NOT UNSPECIFIED
                E PLGA/CN
                E PLG A/CN
L66             1 S E7,E8

     FILE 'HCAPLUS' ENTERED AT 16:02:17 ON 24 APR 2003
L67          3887 S L62,L63,L65,L66
L68           669 S QUIL A OR QS 21 OR MF 59 OR QS21 OR MF59 OR QA21 OR QA 21 OR
L69             3 S PLGA()(5010 OR 5020)
L70         66382 S (LACTIC OR POLYLACTIC OR POLY LACTIC)()ACID
L71         11048 S (GLYCOLIC OR POLYGLYCOLIC OR POLY GLYCOLIC)()ACID
L72          4145 S L70 AND L71
L73           439 S L67 AND L68,L69
L74          1014 S POLY(1W)LACTIDE CO GLYCOLIDE
L75          1553 S GLYCOLIDE(S)LACTIDE(S) COPOLYMER
L76          1168 S POLY(2W)LACTIDE CO GLYCOLIDE
L77          1298 S POLY(S)GLYCOLIDE(S)CO(S)LACTIDE
L78            11 S POLYLACTIDE(S)COGLYCOLIDE
L79         76047 S L67-L78
L80           793 S L79 AND L19
L81            11 S L80 AND VACCIN?
L82            29 S L80 AND INJECT?
L83            33 S L80 AND L32-L37
L84            55 S L81-L83
L85             6 S L84 AND L61
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L86          49 S L84 NOT L85
                SEL DN AN 22 24 41
L87           3 S L86 AND E1-E9
L88          19 S L61,L85,L87
L89          19 S L88 AND (VACCIN? OR INJECT? OR PARENTER?)

     FILE 'HCAPLUS' ENTERED AT 16:12:53 ON 24 APR 2003
                SEL HIT RN

     FILE 'REGISTRY' ENTERED AT 16:13:27 ON 24 APR 2003
L90           9 S E10-E18

     FILE 'WPIX' ENTERED AT 16:14:11 ON 24 APR 2003
L91        6697 S L10/BIX
L92       55190 S L12/BIX
L93           0 S L15/BIX
L94        5165 S L18/BIX
                E MAGNESIUM HYDROXIDE/DCN
                E E3+ALL
L95        5384 S E2 OR 1509/DRN
                E TITANIUM DIOXIDE/DCN
                E E3+ALL
L96       33296 S E2 OR 1966/DRN
                E MAGNESIUM CARBONATE/DCN
                E E3+ALL
L97        3901 S E2 OR 1359/DRN
L98       81426 S L91-L97
L99          11 S L98 AND V28?/M0,M1,M2,M3,M4,M5,M6
L100         20 S L98 AND (D05-H07 OR B14-S11? OR C14-S11?)/MC
L101          4 S L98 AND (B02-V02 OR C02-V02)/MC
L102         31 S L99-L101
                E DK2000-1194/AP,PRN
L103          1 S E4
L104          3 S L98 AND A61K039-39/IC,ICM,ICS
L105          1 S L98 AND A61K039-39/ICA,ICI
L106          0 S L98 AND A61K039:39/ICI
L107         32 S L102,L104,L105
L108         21 S L107 AND A61K/IC,ICM,ICS,ICA,ICI
L109          3 S L107 AND A61P/IC,ICM,ICS,ICA,ICI
L110         21 S L108,L109
L111         11 S L107 NOT L110
                SEL DN AN 8 13 16 17 18 19 20 L110
L112         14 S L110 NOT E1-E15
L113         14 S L103,L112
L114         14 S L113 AND L91-L113
L115         14 S L114 AND (VACCIN? OR ADJUVANT)/BIX
L116          4 S L114 AND  INJECT?/BIX
L117          5 S L114 AND  PARENTER?/BIX
L118         14 S L115-L117

     FILE 'WPIX' ENTERED AT 16:25:28 ON 24 APR 2003
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